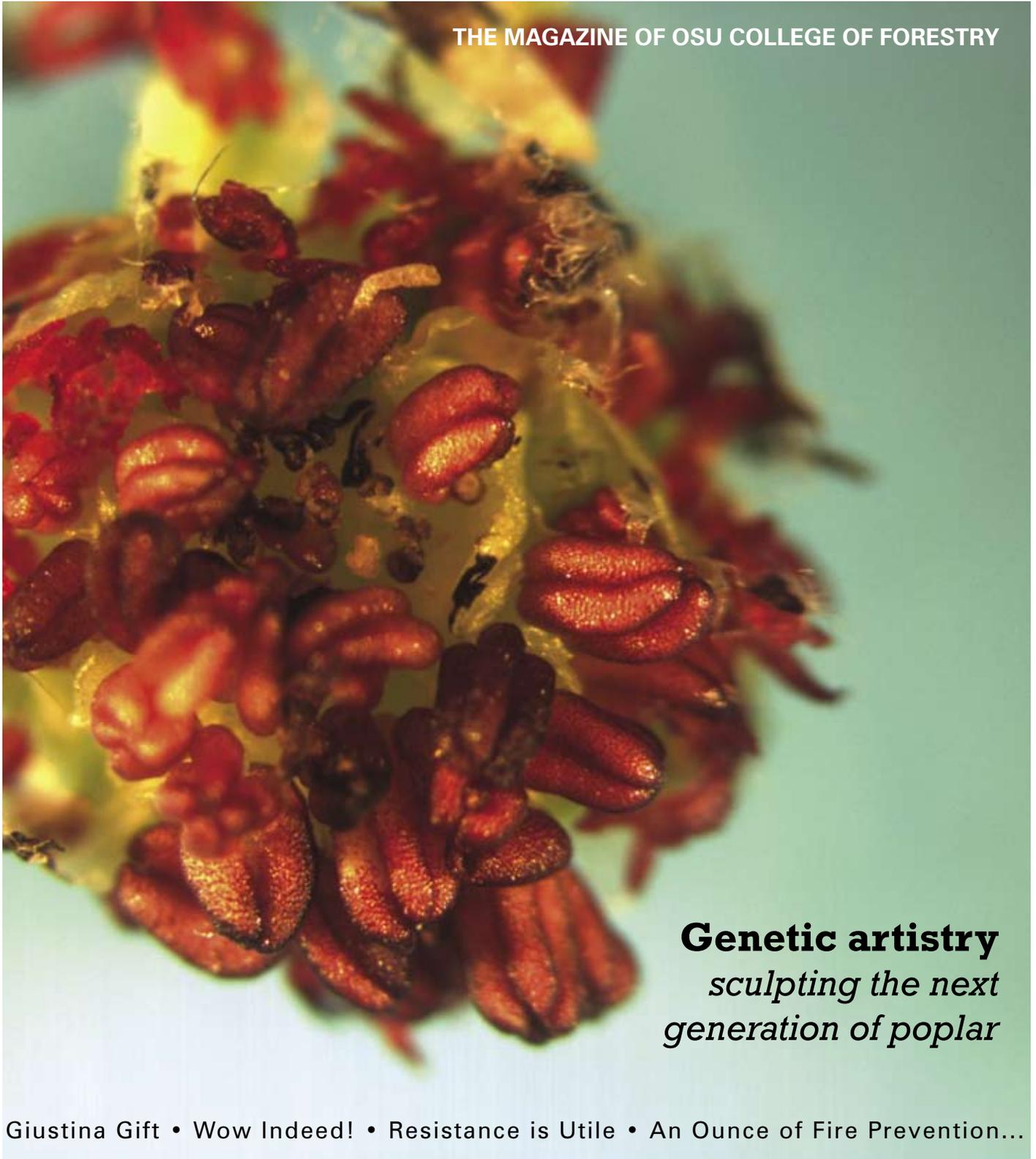


FOCUS

Fall 2008

THE MAGAZINE OF OSU COLLEGE OF FORESTRY



Genetic artistry
*sculpting the next
generation of poplar*

Giustina Gift • Wow Indeed! • Resistance is Utile • An Ounce of Fire Prevention...



Adaptive Management may be a scientific approach for the study of complex ecosystems, but we have found the basic concepts to be useful in transforming the College. We embarked on this task over 18 months ago with the realization that we needed to design an administrative and operating structure that would sustain our teaching, research and outreach efforts, excellence and relevance—in the face of uncertainties regarding operating finances, competing demands for forestlands, public policies, public perceptions, global changes in industry, and the environmental impacts of climate and people. Collectively we established the primary objectives of maintaining our current strengths, and optimizing our faculty interaction/collaboration in order to provide the flexibility to respond to emerging scientific challenges and opportunities. We created and analyzed a number of model configurations to help determine the potential costs and benefits of each option. Our implementation processes began this spring, and on July 1, we officially transformed into the departments of Forest Engineering, Resources & Management (FERM), Forest Ecosystems & Society (FES), and Wood Science & Engineering (WSE). This transformation is a work-in-progress that is off to a good start. We will monitor, evaluate, and adjust as we move forward. This issue of *Focus* provides more details.

Among the articles describing the efforts of our faculty you will read about Mark Harmon's work related to carbon and climate. Climate change is a topic of mounting importance and forests are going to be a very important element in this topic. Forests can play a role in mitigating the changes, but they must also adapt to the stresses caused by a changing climate. A number of our scientists are initiating projects that relate to forests and climate change, and future issues of *Focus* will highlight their work and findings.

As always, this is the issue that highlights our key product—students. We had 174 students graduate in all programs during 2007-2008. It is always a source of amazement and pride to see the degrees, honors, and awards earned by our students. Wherever their next stop after OSU, someone will be pleased with the knowledge and abilities these graduates will provide.

Once again we are very pleased to be welcoming another exemplary group of "Fernhoppers" this fall! We expect more than 110 new undergraduate students on the Corvallis campus (plus an additional 10 new students on Cascades Campus in Bend) as part of the Class of 2012. In addition, more than 51 students are joining in through the Natural Resources Distance program. These students, hailing from Alaska, California, Colorado, Connecticut, Hawaii, Kentucky, Maryland, Nevada, Michigan, Montana, Ohio, Texas, Washington, as well as Oregon, will complete their degree programs online. Our graduate student enrollment continues to be strong with 29 new students in FERM, FES, and WSE joining the 97 graduate students already enrolled in college programs. Welcome to all of our new and returning students!

My thanks to those who have joined OSU's Capital Campaign by making a contribution to the College of Forestry. The generosity of our alumni and friends is critical to continuing student success and faculty innovation. Your gifts help us attract and retain bright and deserving students. Gifts also provide seed money for faculty to afford the time and materials to expand into new areas of research or prepare new courses to help keep our students ready for tomorrow's employers.

Hal Salwasser,
Dean

FOCUS

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Cover: Top view of a
catkin from a male
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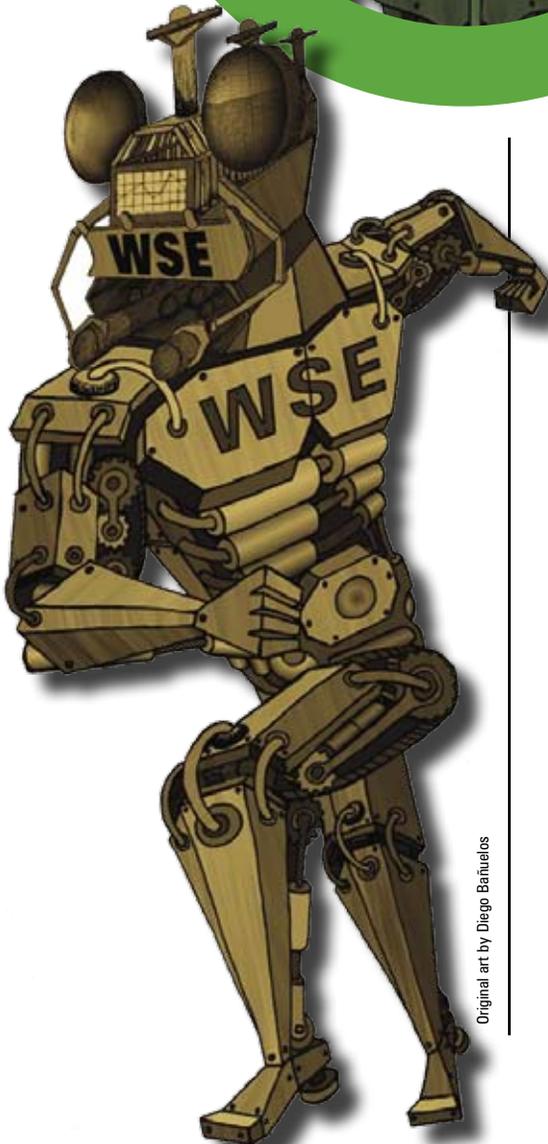
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Transforming the College for the Future

Questions and answers on the College of Forestry Reorganization



Original art by Diego Balmelos

After 18 months of discussion and planning, culminating in a proposal submitted to Oregon State University for approval, the College of Forestry received permission to reorganize from four academic units into three, effective July 1, 2008. The former departments of Forest Resources, Forest Engineering, and Forest Science have reorganized faculty to create two new departments: Forest Engineering, Resources and Management (FERM), and Forest Ecosystems and Society (FES). The Department of Wood Science and Engineering (WSE) remains unchanged. The transition process is now well underway, with changes evident not only on the College website, but in the halls of Peavy and Richardson as department offices are reconfigured.

Despite the changes, however, many key elements have remained the same. Perhaps most important to emphasize is that there have been no changes whatsoever to the current academic degree, research, and outreach programs of the College of Forestry. The College will provide the same undergraduate and graduate degrees—producing students with the skills to enter a global workforce, provide leadership for natural resource issues, or emerge as the next generation of scientists. College of Forestry scientists will continue to seek and provide knowledge to help optimize, sustain and balance the many values expected from forest lands.

What has changed is the administrative structure that supports these programs. The new, streamlined structure will reduce administrative costs, which will help bring expenses in line with anticipated revenues. By increasing flexibility, it will also better position the College to meet the contemporary and emerging needs of current and future stakeholders and the public at large. Beyond these practical advantages, the reorganization also represents an exciting opportunity to increase collaboration across many disciplines—potentially revitalizing existing programs, creating new synergies, and helping the College grow toward a future of possibilities as yet unimagined.

Why has the College decided to move forward in this way?

All successful organizations must reinvent themselves periodically. University colleges typically do this by evolution; for the College of Forestry, the time scale is being accelerated by fiscal reality. The College has experienced two diverging trends since 2000. The first has been very positive: a steady and significant increase in student enrollment each year. The second trend makes it increasingly difficult to support the

first: declining state funding coupled with rising expenses. Oregon's recession at the beginning of the decade resulted in budget reductions for the College and the Forest Research Laboratory. Subsequent funding in the 03-07 period remained flat, resulting in continued decline in purchasing power for our teaching, research, and outreach efforts. The 07-09 budget slows the free-fall, but still leaves the College below our faculty levels and capabilities in 2000.

The reorganization was designed to maintain core programs and faculty while finding budget savings through procedural efficiencies and administrative staff reductions. The ultimate goal is to reach a financial balance in the next few years and begin to restore vacant faculty positions. A re-defined administrative structure can help us reach that balance quicker, and position us to meet the coming changes in forestry. Fiscal stewardship will help keep the College viable to meet the educational and research needs of students, employers, and stakeholders. The demand for our students and expertise continues to grow, so we expect a strong future for the College.

What factors led toward the decision to implement the chosen structural model?

After considerable input from the College community and countless hours of discussions over various approaches to reorganization, the Dean and the Forestry Executive Committee (FEC) chose to not merge existing units but to dissolve three academic departments and reconstitute two. The reasons for selecting this specific reorganization model include the following:

- Best achieves the strategic goals set for reorganization (i.e., protect capacity to deliver undergraduate degree programs, retain key current strengths, reduce administrative expenses), while providing for logical groupings of disciplines that position the College well to meet current stakeholder needs and future challenges.
- Creatively structures faculty expertise in the two new units, one emphasizing all aspects of forest management (FERM), the other addressing knowledge necessary to understand forest ecosystems and their interactions with human society (FES). The third unit (WSE) retains the high visibility of our strength in wood science and engineering. The redistribution of faculty disciplines among departments is expected to generate new synergies and collaborations in teaching, research, and outreach.
- Provides administrative savings of \$290K per year by eliminating some administrative positions.
- Creates a more even distribution of faculty, undergraduate, and graduate degree programs among departments.
- Enables clear definitions of new departmental missions, which will help to maintain strong program identities and stakeholder support.
- Provides better alignment of research cooperatives with departmental missions.
- Positions the College well for grant funding and meeting agency research needs.

Will reorganization foster or accentuate perceptions of a cultural divide in the College?

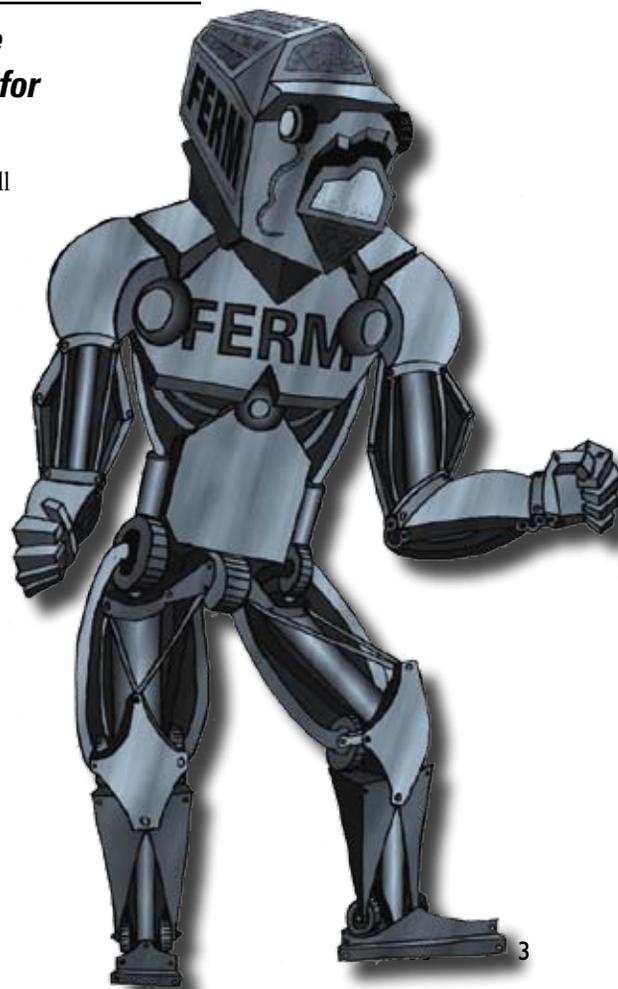
The reorganization should help bridge gaps and encourage collaboration. The new structure ensures that both new departments have a mixture of disciplinary strengths in growing trees and understanding forest productivity, and assessing and using the forest for diverse goals. FERM will concentrate on developing means to produce and manage resources for multiple goals. FES will concentrate on understanding how forest ecosystems tick and the services provided by forested lands for humans and other species. The ways in which the subjects are approached will differ in the departments, but in both departments these goals/services can include production of goods (wood, biomass, fish, game, etc.) and services (watershed protection, balanced forest health, recreation, aesthetic backdrops, carbon sequestration, soil protection, habitat, etc.). Thus, the disciplines are well integrated by the reorganization.

Second, the new departments are expected to provide new ways for people to collaborate in research and teaching by virtue of the new missions and the new proximities.

Third, the walls between departments will be low. For example, a mix of people from different departments will deliver some of the undergraduate curricula. The graduate programs now in place will be unchanged (until they choose to evolve), and the graduate faculty responsible for those will come from multiple units to a much greater degree than prior to reorganization.

What are the implications for students?

Reorganization will have little to no effect on undergraduate students pursuing any major in the College of Forestry. The administrative home of some degree programs will change but there will be no direct impact on the curricula or any of the courses required for each major.



Administrative homes for each of the undergraduate (BS) degree programs have been assigned to departments in the reorganized college as follows:

- Department of Forest Ecosystems and Society: Recreation Resources Management, Natural Resources, Tourism and Outdoor Leadership
- Department of Forest Engineering, Resources and Management: Forest Engineering, double degree in Forest Engineering/Civil Engineering, Forest Management, Forest Operations Management
- Department of Wood Science & Engineering: Wood Science and Technology

Reorganization will have no negative effects on the ability of graduate students to complete their degree programs in the normal timeframe. All graduate degree programs in the College [i.e., Forest Engineering, Forest Resources, Forest Science, Forest Products, Wood Science, Sustainable Natural Resources (Graduate Certificate)] and composition of their graduate faculties will remain unchanged for the immediate future. For administrative purposes, current graduate degree programs have been initially allocated to the departments as follows:

- Department of Forest Ecosystems & Society: Forest Science, Sustainable Natural Resources (Graduate Certificate)
- Department of Forest Engineering, Resources & Management: Forest Engineering, Forest Resources
- Department of Wood Science & Engineering: Forest Products, Wood Science

New students who enroll in the future will fall under the degree programs and requirements in place at the time they are admitted. It is expected, however, that some change in graduate degree programs will occur in the future as a result of reorganization. In fact, new and creative thinking about graduate education in the College is a desired outcome of the reorganization process.

What changes have taken place to date and what is the framework for the rest of the transition?

Physical changes within the College buildings include enlarging the former Forest Engineering office (by expanding into Peavy 206) to create the new FERM office; moving the Forestry Communications Group from Peavy 256 to Peavy 280 (formerly the Forest Resources office), and restoring Peavy 256 to its former status as a large classroom. The Forest Science office in Richardson has become the FES departmental office. More information is available on the College (<http://forestry.oregonstate.edu>) and departmental websites, which have been

redesigned and restructured to represent the new organizational structure.

Tom Adams was appointed to serve as FES Interim Department Head and Darius Adams was appointed to serve as FERM Interim Department Head. These appointments will continue until new department heads are recruited and begin work. Tom and Darius previously served as transition leaders, and were responsible for initiating the process of community building within the new departments and for overseeing the process of identifying and developing the necessary administrative policies, faculty committees, office support, and other procedures that have enabled the new departments to carry out existing programs without interruption. Searches are currently underway to find permanent heads for these new units. It is expected the new department heads will be in place by summer 2009.

Is there anything I can do to help the reorganization process succeed?

We hope you will commit yourself to making this reorganization part of a successful reinvention of the College of Forestry. The strength and reputation of the College has always been based on the sum of its people and its disciplines, not its administrative structure. We encourage building new communities of interest and strengthening existing ones, establishing a shared mission for the future, encouraging dialogue and creativity to build strong linkages between our students and faculty and the expanding range of stakeholders around the globe who value the variety of products and services provided by forestlands.

The College of Forestry has a rich and proud history of teaching, research, and outreach. It has served Oregon, the nation, and world with knowledge and graduates for 100 years. The College will continue to make critical contributions in the future, but within the context of a rapidly changing world. We believe our strategic realignment will increase opportunities for research collaboration and learning, especially across disciplines, as well as ensure that our students are well prepared to meet the growing challenges in natural resources and forestry when they enter the workplace.

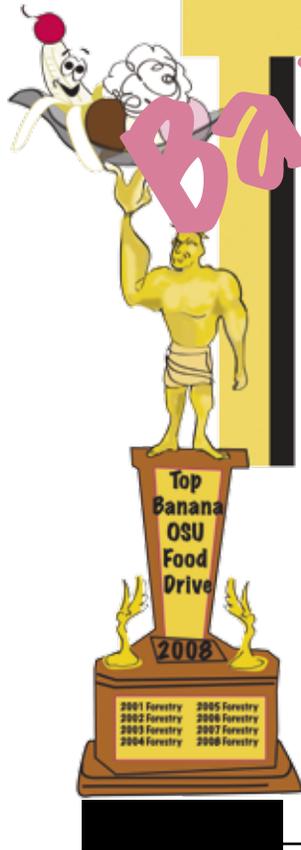
As we reinvent ourselves, it is very important to keep our eyes on the future. The decision was made to maintain visible strength in our core areas and programs; it is a calculated risk that reorganization will help position us for future success and increased revenues. The two new units, combined with the existing strengths of WSE, provide some exciting opportunities for crafting new partnerships and sharing innovative ideas. We are counting on the College's most important asset—its people, including alumni and friends—to capitalize on this opportunity and move the College forward.

Illustrations by Diego Bañuelos, design intern with the Forestry Communications Group. Diego is a sophomore at LBCC majoring in graphic design.

TOP Banana Split Party

Celebrates return of
the Banana...

AGAIN



Top left: Connie Patterson, Ryan McCambridge, Mike Gibson, Nathalie Gitt; Center: Marty Roberts and Lesley Nylin; Bottom: Amanda Stephens, Shelly Houghtaling, Terralyn Vandetta, Aleece Kopczenski.

Illustration by Sandie Arbogast

The College of Forestry once again captured both the "Top Banana" and the "Pot of Gold" in Oregon State University's 26th annual food drive. The Top Banana Award is given to the college or unit that contributes the most food during the annual OSU Food Drive (money raised is converted to pounds of food). This year, the contribution from the College of Forestry was an impressive 40,245 pounds of food—enough to bring home the Top Banana for the eighth year in a row! And, for the seventh year in a row, the College of Forestry also earned the Pot of Gold Award for the most money raised for the food drive.

To celebrate these accomplishments and herald the return of the coveted Top Banana trophy, the College held a banana split party on June 5, 2008. Joining the festivities were special guests Shelly Houghtaling, University Events Director, Ryan McCambridge, LBFS Coordinator, and Mike Gibson, LBFS Manager, who presented the awards and spoke about the impact of the food drive on Linn-Benton Food Share and the local community.

Proceeds from the campus food drive benefit the non-profit agencies served by Linn-Benton Food Share. These agencies include local food pantries, soup kitchens, emergency shelters, day care centers, shelter homes, and gleaning groups

in Linn and Benton counties. Oregon State University is the largest contributor to the food bank, and contributions from the annual food drive help sustain the program throughout the year.

The competition is also important to the College of Forestry because it provides the opportunity for social activities that promote teamwork and build community. The weekly soup lunches hosted by different units, bake sales, book sales, silent auctions, dessert bake-off contest, and the IFSA international luncheon have become a tradition in the College during the month of February. Organizing, promoting, and facilitating these activities is the terrific team of food drive coordinators: Terralyn Vandetta (Forestry Computing); Connie Patterson (NR); Marty Roberts, Susan Morr , and Amanda Stephens (FES); Lesley Nylin (FERM); Kira Hughes and Kama Luukinen (Student Services); Karla Rhoads (WSE), and Katherine Morris, Nathalie Gitt, and Aleece Kopczenski (Dean's Office). "It takes a dynamic group of people to make these events happen each year," notes Dean Hal Salwasser. "Without their passion, commitment, and energy, the College would not lead the campus in donations."

Congratulations, once again, to the entire College of Forestry community for a very successful food drive effort!

WOODS Poetry & Prose & WORDS

Poetry & Prose about Forests,
Forestry, Nature, & Natural Resources

Preparations for the Centennial in 2006 unearthed a long-forgotten tradition in the College of Forestry. During the first five decades of the College's history, foresters read poems at club meetings and around campfires, published poetry in the *Annual Cruise* yearbooks, and even tried their hands at writing verses—everything from sonnets to funny little ditties, and on subjects that ranged from falling asleep over their homework to their classmates' romantic exploits to their professors' foibles. But most of all, these "Sawdust Longfellows"—as they sometimes called themselves—wrote about their love for the outdoors and their pride in being foresters.

This year, the College of Forestry's Building Community Committee (BCC) sponsored a revival of that tradition with the first Woods & Words poetry competition and poetry reading, held in cooperation with the English Department. The competition, on the subjects of forests, forestry, nature, and natural resources, was open to all students in Forestry, Natural Resources, and English at OSU. Out of the many wonderful poems submitted, a panel of judges had the extremely difficult task of choosing two for the top prizes, which included publication and a cash award.

All who submitted poems and prose were invited to read their works at the poetry reading and reception at Richardson Hall on June 6, 2008. A large, enthusiastic crowd turned out to hear not only the original works read by their authors, but selected works written by past alumni and friends of the College and read by current faculty, staff, and students. Selections

included "The Call to the Forest," by Henry Nettleton ('21) read by Caryn Davis (Forestry Communications); "The Forester," by Clyde M. Walker ('39), read by Tom Adams (FES); "Sonnet I," by Wayne G. Hubbard ('48), read by John Bailey (FERM); "When You're So Old," by Robert H. Mealey ('36), read by Dean Hal Salwasser; "We Are Content," by Ken Murdock ('25), read by Steve Tesch (FERM); and "The Song of the Trees," by Marv Rowley ('50), read by Nicholas Som (FS, PhD student). Karen Holmberg, assistant professor in the English Department, read three poems by the American poet Willard Wattles, who spent two years teaching in the English Department early in his career. Wattles, dubbed a "friend of Forestry" by the editor of the *Annual Cruise*, wrote three poems for the yearbook, including the "Poem for the Dedication of Peavy Arboretum Cabin" (1926).

Students who shared their original works at the reading included graduate students Dzhamal Amishev (FE, PhD), reading "Road construction"; Lauren Redmore (FR, MS), "If We Start at the End and Work Forwards"; and Garrett Meigs (FS, MS), "A simple drop of fire"; and undergrads Amanda J. Benton (NR), reading "Old Land"; and Anna Swain (English), reading an untitled poem.

Special thanks go to all who submitted their works and participated in the reading, with congratulations to prize winners Garrett and Anna! We hope to make this an annual event—so please check the BCC website (<http://www.cof.orst.edu/bcc>) for announcements about next year's competition.

A Simple Drop of Fire

*A simple drop of rain,
Or frozen flake in winter
Falls
Freely,
Gently
Finds a ridge-valley-stream,
Grows a forest,
And slowly moves a mountain.
This is a watershed.*

*A simple bolt of lightning,
Or roadside spark carefree
Burns
Quickly,
Wildly,
Across a ridgetop-valley-landscape,
Transforms a forest,
And suddenly, life is diversity renewed.
This is a fireshed.*

*Time is irrelevant.
The human scale a blink
In the forest's eye.
Water in, water out.
Carbon in, carbon out.
Fire is the ongoing mosaic,
Gradients of death and life,
While Cascade volcanoes watch coolly,
Pondering the next glorious eruption.
Everything begins anew,
In time.*

*There is no constant,
Only change.
We too are the agents
Of loss and renewal.
We are the water, the fire,
The movers of landscapes,
Seascapes, skyscapes.
The atmosphere is skin-thin,
And we create
The future:
The present for our children's children;
A present, for our children's children.*

by Garrett W. Meigs
Forest Science

Untitled

*Here lies a thing which
Is new in shape
But old in ingredient.*

*A passageway, stretched long
Grey and shadowed
Between the engineers and physicists,
Pressed into dip and lump
By thousands of paces, in a curve
Grimy liquid lies.*

*In this beast's cup
Can be seen the sky
How? Rest the eyes a moment*

*On the slick surface of this dirty dip
The striving trees, arching their necks
Are mirrored.*

*Thus, in soot, spit, slush-
The creation of an age -
Lie the green trees.*

*Purity portrayed in filth
Monochromatic color
The ground sweeps the sky.*

by Anna Swain
English

An Ounce of Fire Prevention is Worth a Pound of...Future Problem!

Examining stand structural development, fire behavior, and fire ecology

By Bryan Bernart



John Bailey, professor of silviculture and fire management at Oregon State University, grew up on a farm in Virginia, where he became interested in forestry at a young age. Bailey enjoyed playing in woodlots and exploring the countryside near his home. “Since I had relatives who were active in farming, woodlot management, and extension services, I was exposed to those kinds of careers at a young age,” he says.

As a teenager, Bailey built homes with his father, a housing contractor, which gave him experience working with wood. “When the time came to select a profession, I knew it would be forestry,” says Bailey, “and Virginia Tech provided a lot of opportunities to explore forestry when I was still an undergraduate student.”

Bailey completed his BS and MS degrees at Virginia Tech, during which time he also worked at many jobs within the government and industry, such as fighting fire with the Forest Service and doing loblolly pine research with Westvaco. Because of its economic importance, there is considerable interest in finding better methods for growing loblolly pine. “In the Southeast, loblolly pine provides the equivalent of our ‘breadbasket,’” he says, “but it’s really kind of a ‘toilet-paper-and-cardboard basket!’”

Bailey found that forestry research really captured his interest. For his master’s degree, he studied Fraser fir, which grows at the highest elevations within the eastern hardwood forests of the Appalachian Mountains, forming “sky islands.”

Eventually, work on an acid rain project led him to the Corvallis EPA Laboratory. During this time, he began working with researchers at OSU, ultimately including John Tappeiner (Emeritus Professor, Forest Resources). Bailey went on to obtain his PhD from the College of Forestry in 1996 examining structural development in multi-aged stands, then joined the forestry faculty at Northern Arizona University. He returned to OSU in 2006, where he is an Associate Professor in the Department of Forest Engineering, Resources and Management.

Bailey’s current work allows him to explore several different research areas, including structural development of stands and fire behavior and ecology. “My structural development work comes from my past with John Tappeiner,” he explains, “and involves many people and agencies, including the Forest Service, BLM, and ODF.”



John Bailey, photo courtesy of University Advancement, OSU.

His central focus is on the long-term development of two-aged or more complicated multi-aged stands and how these affect broad ecosystem services like wildlife habitat. “When all of the trees in a stand are the same age, growing like a plantation, there is a relatively simple structural development in the stand,” he says. “What happens in this situation is that all of the living foliage of trees moves up off the ground and produces a kind of ‘blob.’ When that’s cut down, it’s replanted and the process repeats.”

Trees in this kind of stand are nearly identical, which is the point with plantation silviculture, but produces very little structural diversity. A dearth of structural diversity, combined with the homogenous nature of a plantation, can run counter to fostering broader ecological objectives for a piece of land, he explains. “Healthy older forests are known for their heterogeneity, and contain a range of large and small trees and lots of structure and diversity. Many landowners recognize this and are slowly moving away from the ‘cornfield-style’ approach to forestry that was popularized beginning in the 1950s.”

Bailey’s research on fire ecology and management complements all this structure work and builds on his research at Northern

Arizona University, where he studied semi-arid forest types, particularly ponderosa pine and pine-oak ecosystems. He found that in the Southwest there was a lot of interest in stand structure—not only due to ecological concerns, but also from a desire to lower the potential for damage incurred during annual wildfire seasons. “Fire ecology and fuels management research is very complicated work on a variety of levels, and the field has really changed a lot in recent years,” he observes. “The reality is that fuels accumulate and dry every year. With climate change, there is added concern that areas with extraordinary fuels accumulation will burn in increasingly unusual ways.”

Treatments for areas with unnaturally high fuel accumulations, as well as areas with more normal levels, focus on restoring surface fuel conditions (typically reducing them) and canopy density/continuity so that when these areas eventually burn, the results aren’t unnaturally severe. “Strangely, we spend billions of dollars a year on fire suppression in areas that need burning, money that would be much more effective if it were spent more comprehensively on fuels reduction,” Bailey observes. Even more troubling is that fire suppression is most often used (and actually possible) early in the season and in moderate years when fire behavior would be modest and most natural; however, such suppression only delays the real and inevitable problem and actually makes the burns the following year that much worse, since fuels accumulate between seasons without fire or restorative silviculture, he notes.

In addition to his research duties, Bailey also teaches fire management and fire ecology courses at the undergraduate and graduate level, along with classes in silviculture and prescription writing for broad management objectives. “I enjoy academia and feel like it has been such a great fit for me,” he says, “To be able to work with students, to mentor them along, is extremely fulfilling. I feel very at home in this environment.”

Left: In the balance, restoration treatment and fire surrogate site; (below) professor modifying fire spread with hot air during FOR436 burn table demonstration, October 2008. Photo by Shawn Faiella.



Engineering *SUCCESS!*

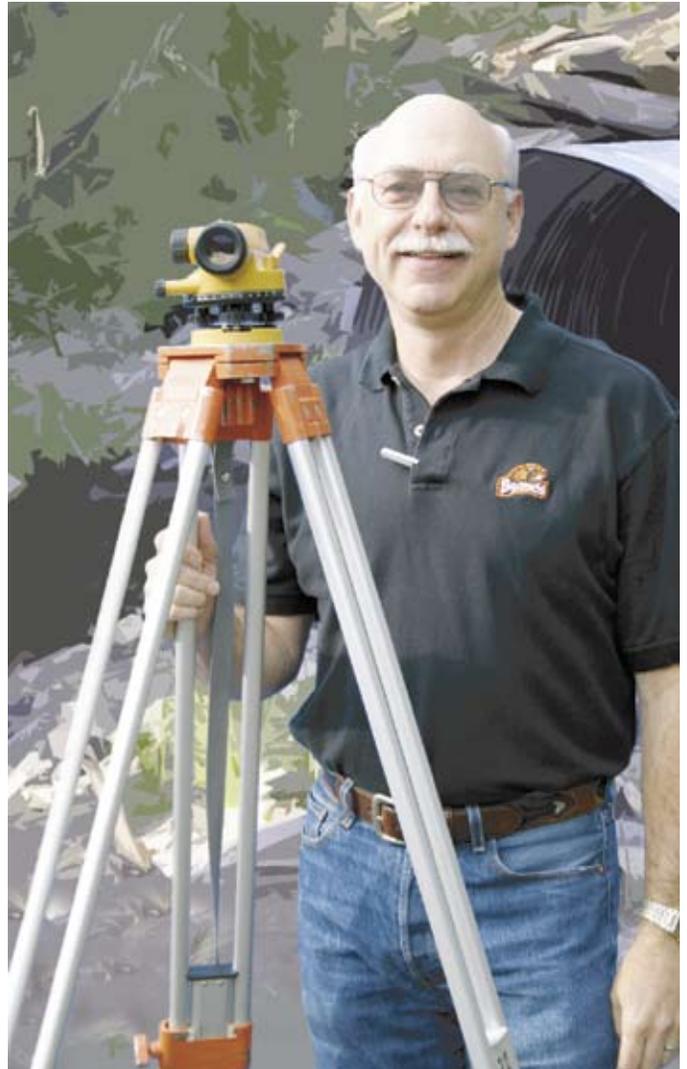
Helping forestry programs meet educational goals through accreditation

By Bryan Bernart

Marv Pyles, Professor of Forest Engineering in the Department of Forest Engineering, Resources and Management, knows that engineers must pay careful attention to detail when designing bridges and roads to ensure the safety of those who will use these structures. This same attention to detail makes Pyles the ideal person to guide the accreditation efforts for the Forest Engineering program. When the students in Oregon State's Forest Engineering program graduate, they will know that the education they received has met the standards of both the Society of American Foresters (SAF) and the Engineering Commission, of ABET, Inc., the national engineering accreditation body in the United States.

"ABET accredits all of the engineering programs in the United States, explains Pyles. "Every six years, they visit each school to check up on its programs and ensure that the school is meeting their standards."

This is not Pyles' first experience with working on accreditation. During the summer of 2007, he wrote the accreditation self-study for the forest operations management [degree] program. The program was reviewed by SAF and was approved for accreditation. In the spring of 2008 Pyles finished the self-study for the Forest Engineering program in preparation for a campus visit by an ABET team this fall. There are a variety of criteria that ABET considers before awarding accreditation to deserving programs. There are nine criteria that ABET assesses at each school. Included in these nine criteria is a list of "outcomes" for the program, which include such aspects as applying science and math to engineering, designing systems, understanding professional responsibility, and demonstrating knowledge of contemporary issues. "These are all outcome-based, which means that they are attributes that each graduate must have when they graduate from the program," Pyles explains. "What we and the administrators at other ABET-accredited programs must do is build the curriculum so that it addresses these outcomes, proving that these attributes are achieved. The final step is to then show ABET that our students have met their requirements."



Marv Pyles

In order to do this, Pyles developed a system of portfolios. In each student's portfolio, work is placed that applies to ABET's categories. The portfolio also identifies which class corresponds to each outcome. "For each outcome, we sample a couple of classes, and in each class, there is a student work product that demonstrates achievement of that outcome," Pyles says. "If the student succeeds on the work, then that outcome has been successfully addressed. If the student does not succeed, there are other opportunities to pass, and the student can also go back and fix errors he or she made and still receive credit for the outcome."

Pyles admits that administering this system and keeping track of all of the data it generates requires a great deal of work, but he strongly believes that the benefit to students justifies the time and energy needed to maintain ABET accreditation. "If we don't do this, our graduates are not eligible to become professional engineers, by virtue of their education," he says. "It's important to us that our graduates are well-prepared for their future careers."

Along with overseeing the accreditation processes, Pyles also finds time for research work, teaching, and other tasks. His current research is in forest hydrology, and includes a project in conjunction with Brian Dieterick, a professor at Cal Poly, San Luis Obispo. "We have invited Brian to join our faculty as an affiliated professor in forest hydrology," says Pyles. The two share a PhD student who, along with other students, is working on a forest hydrology project at Cal Poly's Swanton Pacific Ranch,

a plot of land that fulfills both agriculture and forestry research needs. "It's their equivalent to our McDonald Forest," he says.

Pyles also recently served as managing editor, then as technical editor of the *International Journal of Forest Engineering*, a task he took on when the journal was in danger of going under. During his two years' tenure, subscriptions to the journal nearly tripled, largely as a result of Pyles' proposal to have the Forest Products Society take over publication and ownership of the journal.

Pyles has myriad responsibilities within the College, but the situation suits him well because he enjoys the work he does. "Being able to pave the path for our graduates to progress toward professional registration and success in their careers is rewarding," he says. "I consider it a calling, really. People who are like me are here because we want to be. We like what we do, and we like helping students."

Bryan Bernart is an editorial assistant with the Forestry Communications Group. He is a senior at OSU majoring in English.

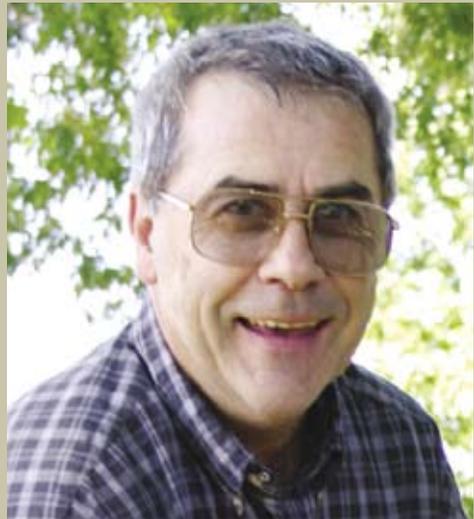
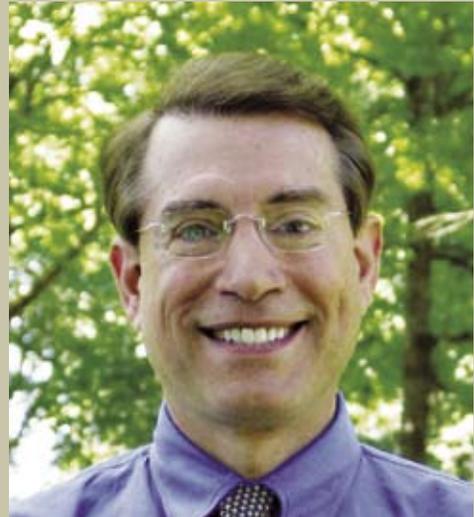
First Strachan Chair and New Stewart Professor Announced

Professor John Sessions (FERM) was appointed as the first holder of the Richard Strachan Chair in Forest Operations Management, effective July 1, 2008. The endowed chair was made possible through the generosity of Rick Strachan (FM, class of '78), who donated \$3.6 million to the College in 2006.

"We are tremendously grateful to Rick for his continuing support of the Forest Engineering faculty, students, and programs," said former FE Department Head Steve Tesch. "His investment in this Chair position helps to assure Forest Engineering faculty capacity in the College for the future."

Professor Glen Murphy (FERM) was appointed as the new Stewart Professor of Forest Engineering, also effective July 1, 2008, filling the position formerly held by Sessions.

"I am really pleased that we were able recognize the accomplishments and quality of both John and Glen in this process," Tesch added. "They are outstanding 'thought leaders' in the Forest Engineering field and we are fortunate they are members of the faculty team in the Department of Forest Engineering, Resources, and Management."



John Sessions (top), Glen Murphy.

Genetic Artistry

Sculpting the next generation of poplar

By Bryan Bernart



Steve Strauss getting set up for sampling catkins high in flowering poplars in a research trial. Photo by Liz Etherington.

Steve Strauss, Professor of Forest Science (FES) considers his current area of study a “volatile” one. “The concept of biotechnology, especially genetic engineering (GE), is volatile because the public isn’t yet sure how much of it they want and whether to embrace the scientific advances we’ve made,” explains Strauss.

Within the field of biotechnology, Strauss has taken a particular interest in poplar trees and biofuels, two areas that he believes could benefit a lot of people, particularly amidst rising food and fuel costs. “A lot of what I want to do hinges on applying GE biotechnology to make poplars grow better or faster under intensive cultivation,” he continues, “what that will yield is better energy and better crops.”

Strauss’s current research on poplar trees has several distinct facets, but together, they all aspire toward a similar goal: modifying the trees so that they grow in different ways, for different purposes. The first method for modifying poplar involves controlling the signaling of the plant hormone, gibberellic acid (GA), one of the growth hormones present in trees. Before the advent of biotechnology, scientists could not adjust such a specific variable within a plant species and instead relied on phenotypic assessment (i.e., how the trees look) in order to obtain desired traits in new offspring. “GA, which has a lot of roles in controlling plant growth, controls flowering, size, and the allocation of biomass between the shoots and the roots, among other functions,” says Strauss. “Within the last several years, we have been tweaking the genes responsible for producing and regulating GA to see if we can use them to sculpt trees in ways that would make them better for applications in short-rotation bioenergy plantations.”

For dense bioenergy plantations, short, narrow trees packed tightly are hypothesized to yield the best—which runs contrary to the typical forestry goal of producing large trees that are useful in many wood products applications. Other situations may call for shorter, fatter trees, however, and Strauss has been experimenting with a method of creating these as well. Normally, poplars grow very fast at high density. “They can sense when there are competing trees nearby because the light quality is different,” he says. “The tall, lanky trees have limited root systems and weak stems, which leaves them vulnerable to wind storms. They tend to blow over easily, particularly when the soil is moist, which is a real problem for poplar growers in the Pacific Northwest. If GA-modifying genes could be used to keep the trees more short and stout, it might avoid this problem.”

Another possible solution to this problem is to turn down a gene that encodes the protein “phytochrome,” which allows the trees to sense light, both quality and photoperiod. This should also help to keep trees from growing too tall when planted at high density.

field trials to see if the increased yield potential we have seen is also expressed under the more stressful conditions in the field.”

These findings could also be important because of recent interest in sequestering carbon more efficiently to slow down global climate change. This

with the same sequence are expressed differently, and thus can cause changes in important traits, such as stress resistance, maturation, flowering, and ease of propagation.”

To help jumpstart this work, Strauss and two other professors at OSU just received

leaders in biotechnology science and policy speak at OSU.

Strauss is very excited about his work, but knows that the research he pioneers can only go as far as the public is willing to allow. “I think that society, in general, is on the path to accepting biotechnology in



Charleson Poovaiyah (Faculty Research Assistant) near a field trial of genetically modified research poplars. Photo by Liz Etherington.

Modifying phytochrome genes might also have another benefit, according to Strauss. Early research trials produced trees that were very narrow, had almost no branches, and “were like poles.” With careful modification of this class of genes, it might be possible to produce the narrow crown trees desirable for high density biomass plantings. With even more subtle modification, these genes might also be useful for producing timber trees that have fewer and smaller branches, and thus smaller and fewer knots in the wood.

“Another way we modify poplar is to ‘upregulate’ the genes that increase the GA signal, which means that the trees tend to grow faster, have longer wood fibers, and have larger cells generally,” says Strauss. “This doesn’t change the shape of the tree a great deal, but can produce trees that grow faster under conditions of abundant light, water, and fertility.” In recent months, this method has been successful in some greenhouse trials, Strauss says. “We are now beginning

might be done by increasing root relative to shoot growth, and thus storage of carbon in soil. Some recent field trials with GA-modified trees showed that some varieties produced much higher root:shoot ratios. Alternatively, if faster-growing or higher-yielding poplars can produce more biomass for conversion to electricity or liquid fuels, this source of renewable energy could reduce (offset) the need for burning fossil fuels, which have a large impact on greenhouse gas accumulation in the atmosphere.

In the future, Strauss sees his research moving toward the area of epigenetics, which describes genetic changes that are not related to DNA sequence. “Most people would think that heritable traits in a species are different because the DNA sequences are different,” he explains. “As it turns out, you can also modify the chromosomes with proteins and by chemically changing the structure of the DNA, while the DNA sequence remains the same. The result is that genes

a grant for \$1.2 million dollars from the Department of Energy’s Plant Feedstock Genomics for Bioenergy Research Program. Its goal is to map, for the first time, the epigenetic changes that occur during the life cycle of a tree. Of course, for Strauss this will be in the poplar tree, selected for its scientific advantages and possible use as a dedicated energy crop. Strauss, who is the lead scientist on the grant, expects at least two students to take part in the work for their graduate thesis research.

In other work Strauss has been studying national regulations and policies regarding tree biotechnology and he played a major role in crafting the recent position statement on forest biotechnology adopted by the Society of American Foresters. He sees this kind of work as a form of outreach, a longstanding interest for him. Strauss also directs the University-wide program for Outreach in Biotechnology, which holds an annual public lecture series where national



Steve Strauss, Professor of Forest Science in the College of Forestry, was recognized with Oregon State University’s highest academic honor, the title of “Distinguished Professor,” in May 2008.

most of the world, especially given the urgent need to find affordable, renewable sources of biological energy and high quality and inexpensive food. But a lot of research, and the evolution of more intelligent social institutions, will be needed before it can come to fruition. I hope we have the foresight to look beyond the current state of social dissonance about biotechnologies and keep research moving forward.”

Carbon and Climate Change

Exploring the relationship between people and forests

By Bryan Bernart



Mark Harmon, professor of Forest Science in the Department of Forest Ecosystems and Society, remembers becoming interested in decomposition as a boy, “while digging through our compost pile for worms to use as fishing bait.” Little did he know that decomposition would play a major role in his future career as an ecologist working to understand forest carbon and climate change.

All living matter contains carbon. Because of their size, trees in forests store a large amount of carbon. Studies on global climate change have shown that the release of carbon into the environment as CO₂ causes a “greenhouse effect,” warming the planet. When forests burn, CO₂ is produced and released into the atmosphere. Says Harmon, “There’s been an awful lot of recent concern about how forests might influence this situation (climate change), and so we’ve been studying how different kinds of management techniques and natural disturbances in forests affect the amount of carbon present there.”

Harmon’s group studies natural disturbances on both a theoretical and an actual level. “We use both simulation and field studies because it can take decades to see the results of this kind of research,” he explains.

The scientific community has been interested in forest carbon for several decades, but the kinds of gradual changes that occur in the carbon levels of forests necessitate hundreds of years’ worth of observation. This is where models become useful, says Harmon. “They allow us to observe trends that we could not otherwise see.”

In the past, it was common to study only the trees when looking at the carbon dynamics of a forest, he notes. Researchers now understand that the entire ecosystem affects the carbon balance of a given region. “You look not only at all of the components of the ecosystem, the live trees, dead trees, the soil, and the forest floor, but also at what happens to the material after it has been harvested,” Harmon says.

After trees are harvested, wood products go into homes, buildings, bridges, and telephone poles, among countless other applications. This wood stores carbon for a time, but eventually it too deteriorates, as would woody debris in a forest. “Many people are convinced that wood is harvested, goes into buildings, and never rots,” he explains, “Obviously, this is not the case.”

Harmon feels that one of his primary duties is educating the public about carbon dynamics, especially in situations where misinformation already exists. One example is the belief that young forests take up more carbon than old forests, and therefore, it is better to maintain a younger forest than an older one, for purposes of sequestering carbon. “If we believe that a forest takes up the most carbon from the atmosphere when all of its trees are 35 years old and then we attempt to maintain a 35-year-old forest, well, it’s plain that the idea is absurd,” he says. “In order to become a 35-year-old forest, a forest must first be a 1-year-old forest, a 2-year-old forest, and so on. The idea of trying to maintain a single-aged forest for carbon purposes is ridiculous.”

When not conducting research on carbon dynamics, Harmon has been working with many other faculty members on the College of Forestry’s Initiative on Climate Change. Of the two general areas of focus, Harmon is working on carbon dynamics systems. “My colleagues, including Olga Krankina and Bev Law, and I are trying to figure out ways in which we could use forests in order to actually reduce the amount of CO₂ in the air,” he says.

The College Initiative on Climate Change is a unique endeavor—never before have so many researchers at the College of Forestry pooled their efforts to take on a singular issue. “Many of us are individually well-known,” Harmon notes, “but now we have the opportunity to earn OSU recognition on a large scale. I’m looking forward to continuing this work with other scientists who are passionate about understanding the world we live in.”

AWARD WINNING FOREST ECOSYSTEMS & SOCIETY GRADUATE STUDENTS



Cristina Eisenberg (left); Daniel Donato.

Two graduate students from the College of Forestry were named the first recipients of Oregon State University’s Mason Prize for Integrity and Moral Courage. Cristina Eisenberg (FR) and Daniel Donato (FS), both of the Department of Forest Ecosystems & Society, received the award in June 2008. The prize, which includes an honorarium of \$1,000 to each recipient, is designed to “honor, encourage, and empower people at Oregon State University whose work demonstrates academic virtues.” The award was created earlier this year and will be administered by OSU’s Spring Creek Project for Ideas, Nature, and the Written Word.

“With their studies of the significance of wolves to healthy ecosystems, and the effects of logging on the recovery of burned forests, these young scientists demonstrate the importance of sound science to controversial public policies,” the presenters said in their award citation.

Donato also received the 2008 Outstanding Student Research in Ecology Award made by the Ecological Society of America. The award was presented in August at the annual meeting of the ESA in Milwaukee, Wisconsin, for Donato’s studies on post-fire harvest effects on natural vegetation regeneration after the 2002 Biscuit Fire in Southwest Oregon.

Left: Mark Harmon measuring a western hemlock trunk at Cascade Head as part of a 73-year-long study of forest growth and mortality. Photo courtesy of University Advancement, OSU.



RESISTANCE IS UTILE

Wood products research weathers move into DNA sequencing

By Carrie Breckel

Resistance is not only useful, but crucial, because wood products face attack from every angle: weather and insects from the outside and fungus and decay from within. How is it, then, that products such as power poles, window frames, pallets, doors, and composite wooden panels, just to name a few, fight the elements, and last for many years? Many people are unaware that their wood products are not fully exposed to the elements, but are in fact treated before sale to prevent mold, weathering, and decay. The College of Forestry's Wood Biodeterioration Lab is responsible for the longevity of many of these common goods. The program is the only one of its kind west of the Mississippi River and can trace its history back to Professor T.J. Starker, who established the first post tests at Peavy Arboretum in 1927, the oldest test on the College Forests. The lab research team is currently composed of three staff members and five graduate students, though undergraduate students are also employed, and there are usually one

or two international visitors. Some undergraduates additionally gain valuable experience through courses and senior projects conducted in the lab. All of the students, employees, and projects in the lab are supervised by one person: Senior Faculty Research Assistant Camille Freitag (MS, plant pathology, OSU; BS, forest biology, State University of New York, College of Environmental Science and Forestry, Syracuse).

The Wood Biodeterioration Lab works on a number of projects in conjunction with companies and government programs to ensure that wood preservatives provide durability without adversely affecting the environment. One of the biggest impacts of the program has been the development of remedial treatments for wood poles and other large timber structures. Nearly all of the internal remedial treatments in use in the U.S. were developed through OSU research. These treatments extend wood pole life, reducing the need to harvest trees and

Connie Love setting Douglas-fir pole stubs at the pole farm at Peavy Arboretum (top); pole farm at Peavy Arboretum, with T.J. Starker Post Farm in the background. Photos by Camille Freitag.



literally save consumers billions of dollars in electricity costs each year. Wood pole failures not only can cause public power outages, but can be a threat to human life and safety. The replacement of a utility pole due to wood failure costs approximately (\$4,000–5,000), so preventative treatments of the wood are much cheaper and more efficient in the long run. “Keeping wood in service also lessens the demand for new wood to be cut,” adds Freitag.

The lab works closely with the Utility Pole Research Co-op, which currently has 19 members from utility companies throughout North America. The Co-op provides approximately 50% of the funding for the Wood Biodeterioration Lab and is a key research partner. Much of the field work for the Co-op is done by Faculty Research Assistant Connie Love (BS, soil science, University of Wyoming; MS, plant pathology, Washington State University), in New York, Georgia, Hawaii, and multiple sites in Oregon. Love’s job involves testing various preservation methods on utility poles already in use around the country in order to improve the durability of the wood. She works closely with utility engineers across the U.S. and Canada. Chemical procedures in the lab are conducted by Hua Chen, a chemist and the third member of the team. Chen assesses the amount of preservative left in

a sample of wood after varying amounts of treatment and weathering have occurred. She is also actively involved in a Co-op project to determine rates of chemical migration from poles in storage and how to limit this movement.

Although the primary aim of improving wood durability has not changed over the past century, Freitag notes that the Wood Biodeterioration Lab has had to develop new techniques to keep up with scientific progress. A recently added research component is DNA sequencing to identify organisms within wood, particularly fungi. For identification, a researcher extracts the DNA, determines the DNA sequence, then looks for a high percentage of comparable structure between the sequence and DNA from species recorded in a DNA sequence database. “We continue to identify fungi by more traditional means such as microscopy and substrate usage,” Freitag says, “but have added molecular methods.” Freitag is interested to know whether using a different method will paint a different picture of what organisms inhabit various woods. This information can help those designing new systems to target organisms for control. Though the new DNA component of research is exciting, it is essentially just a new method for solving previously existing problems, notes Freitag.



Researchers in the Wood Biodeterioration Lab are also very interested in improving the durability of second-growth timbers, such as cedar, redwood, and even non-American teak. Second-growth teak and redwood tend to be less durable than old growth, although the reasons for this are not yet fully understood. One reason may be that the faster grown trees produce less of the chemicals that make them durable. The Wood Biodeterioration Lab is currently researching ways to increase durability, and therefore value, of wood from these second-growth forests by using organic chemicals that do not alter the natural beauty of the wood.

Graduate student and current lab member Yohanna Cabrera, who received her MS in wood science from OSU in 2008, is conducting research for her PhD that involves both DNA sequencing and improved durability of tropical woods. Cabrera observes thousands of pieces of treated wood of various species at a site in Hilo, Hawaii, in order to understand how the wood will fail. Her goal is to develop chemical treatment methods for ensuring that wood from fast-grown plantations of durable wood species retains its durability. Understanding the fungi that degrade these materials is an important part of developing

Camille Freitag loading a gel in the Wood Biodeterioration Lab at Richardson Hall as part of the process to prepare fungal DNA for identification (top); Connie Love applying a granular fumigant to a Douglas-fir pole stub at Peavy Arboretum. Photo by Randy Gross.





Student worker Sean Hayes (ME) preparing samples for the x-ray fluorescence analyzer in the Wood Biodeterioration Lab, Richardson Hall. Photos by Bryan Bernart.



effective treatments. Some fungi accelerate the decay process, so Cabrera observes all the microorganisms closely. One problem she faces is that few fungal species from tropical locations are recorded in DNA sequence databases, so new specimens are extracted from the wood and their DNA is sequenced. Expanding the DNA database will aid others in future identifications.

The lab also cooperates with many companies and individuals in smaller projects, which include the evaluation of preservative efficacy, limiting preservative migration, treatments for eliminating pests in wood used in global commerce, and improving the durability of composites used in structural applications.



FAREWELL, JIM

After 28 years of teaching, research, and service to Oregon State and the College of Forestry, Professor James W. Funck (WSE) has begun a new career as the Manager of Lumber and Wood Science for the Weyerhaeuser Company in Federal Way. Members of

the College gathered in April 2008 to honor, celebrate, and recognize his many contributions to Wood Science and Engineering (Forest Products) and to the many students who have passed his way, and to bid him a fond farewell. Best wishes, Jim!

2008 Lumber Drying Workshop

Carrying on a tradition that started in 1948, Mike Milota (WSE) shares his knowledge of drying technology through an annual workshop, "How to Dry Lumber for Quality and Profit." Some 40 industry workers benefit from the workshop each year. The next workshop is scheduled for December 8-11, 2008 in Richardson Hall. The course includes practical, up-to-date information on wood properties and is designed to provide a basic understanding of how both steam-heated and dehumidification kilns are made, operated, and maintained, and how to create and modify kiln schedules for different species. Drying to meet the European quality standards and heat treating standards are also discussed. Information is presented by university practitioners and researchers, consultants, and industry representatives using multimedia and laboratory exercises.

For more information, please contact OSU Conference Services, 541-737-9300 or 1-820-678-6311, or visit <http://oregonstate.edu/conferences/lumberdrying2008/>.

Capturing Volatiles: a Highly Charged Process

Research finds new ways to decrease emissions and save on costs during wood drying process

By Alison Moldenke

Ah, the smell of baking gingerbread! Those delightful aromas arise from volatile compounds filling the air. Like baking gingerbread, lumber heated during drying gives off volatile organic compounds (VOCs) that can cause smog and lead to formation of ozone in the lower atmosphere. Ozone is an irritant to humans and other living things and decreases crop production and forest growth.

“Drying lumber is responsible for as much as 85% of the energy required to process logs into lumber and is also responsible for most of the airborne emissions,” says Mike Milota, Professor of Wood Science and Engineering. For nearly two decades, he’s been working to improve lumber quality by improving drying procedures. Lately, he’s added emission control to his list of concerns.

Milota has developed and validated a small-scale method for estimating how VOC, methanol, and formaldehyde emissions vary with initial wood moisture content and drying schedule for the most commonly dried species in the western U.S. Many mills use these values, and they are included in the Oregon DEQ’s Standard Air Contaminate Discharge Permit. This information is useful for mills in complying with federal and state regulations and maintaining a clean environment.

“Establishing this small-scale test method that accurately simulates results from a large kiln has been a major accomplishment of our program,” says Milota. “Testing emissions from a large kiln is difficult and expensive.” Milota’s research is credited with helping Oregon manufacturers avoid \$15 to \$20 million dollars in unnecessary regulations.

Some of the VOCs from wood, such as methanol and formaldehyde, are listed by the EPA as hazardous air pollutants and subject to control under the 1990 Clean Air Act Amendments. Milota and colleague Kaichang Li, Associate Professor of Wood Science and Engineering, have been testing the ability of a dozen ionic liquids—organic salts that are liquid and don’t evaporate—to capture undesirable emissions from dryers and presses. Having identified the best performer, they have scaled up from small vials in the laboratory to a 2-meter column into which a sample of dryer or press emissions can be directed. The ionic liquid is regenerated in a second column and reused. Such a device would use much less energy than alternative emission control devices, such as thermal oxidizers. Milota and Research Assistant Paul Moser spent much of fall quarter 2007 at a veneer dryer and a particleboard press testing the column under different conditions and obtaining 80% to 99% recovery of the pollutants.

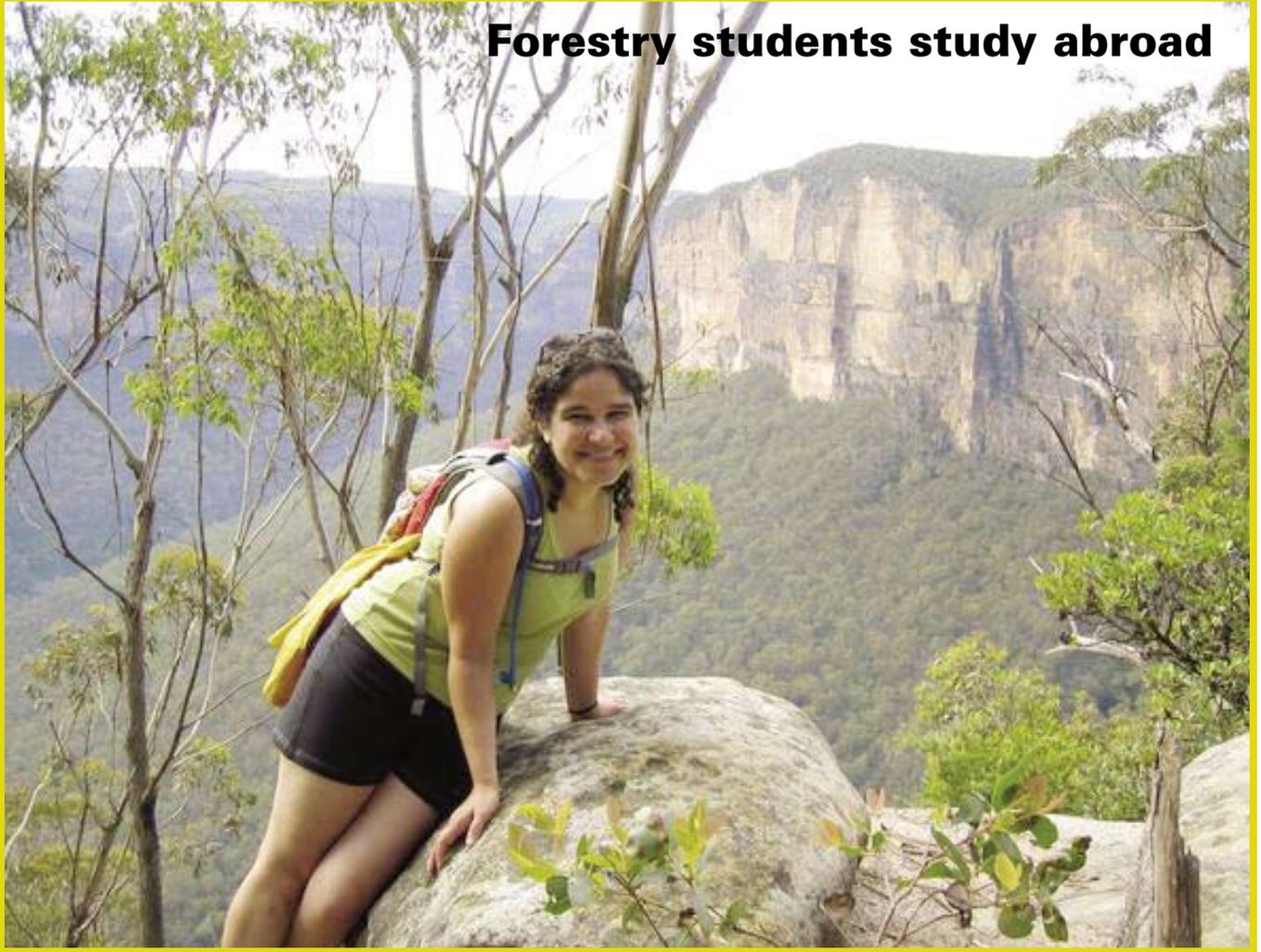


Mike Milota operating a laboratory dry kiln in Richardson Hall.

Milota is currently working on a project with Wagner Electronic Products in Rogue River, Oregon, and four sawmills in the Pacific Northwest and the southern U.S. to better utilize information collected at the planer for quality control at the kilns. This is moisture content information that, in many cases, is already collected and not currently used. The objective is to relate what is being measured at the planer back to the rest of lumber processing so that mills can do a better job of producing lumber with consistent and uniform moisture content. Drying a board to the correct moisture content is very important for maximizing its value, so improvements in this area would be welcomed in the industry.

Opportunity of a Lifetime

Forestry students study abroad



Crystal Perez-Gonzalez at the (Australian) Grand Canyon in the Blue Mountains of New South Wales, west of Sydney.

By Carrie Breckel

The college years of one's life are unlike any others. Lifelong friendships are formed, beneficial career contacts are made, and the memories of these formative years stay with a person forever. Opportunities unique to college students abound at Oregon State University, and among these is the option to study abroad.

Multiple OSU College of Forestry students study abroad each year, and gain valuable real life experience. Crystal Perez-Gonzalez, senior in Forest Management with a minor in Soil Science, fondly recalled her trip to Australia. "It gave me a completely different perspective on what an American is and how important land is to individuals all over the world," she said.

Crystal studied at the Australian National University (ANU) in Canberra, the capital of Australia, from February to July of 2007. Though dormitory, host family, and student housing options are available in most programs, Crystal chose to live

off-campus with Prystynne Karmina, an Australian student. The friends met when Prystynne came to study at the College of Forestry during the previous year.

While abroad, Crystal tried to immerse herself in Australian culture. She ate typical Australian foods, such as pineapple and grilled cheese, pancakes with ice cream, and the popular vegemite toast spread. She learned how to understand the heavy Australian accent and foreign terminology. "They really are two different languages, Australian and American!" Crystal said. She added that she relied heavily on the public transit system and her own two feet to get around town.

She also took full advantage of travel and activity options outside of class. "I traveled at every opportunity I had," Crystal said, "I joined the ANU Mountaineering club and the ANU Scuba Club. I went hiking (bush walking), rock climbing, surfing, diving, and cycling often." Through all of these adventures, as well as

through her classes, Crystal met a lot of good friends. As for “down sides” to her trip, she replied, “I liked everything about it!”

Crystal’s Australian connection was Prystynne, but OSU student John Simons (NR) has a connection a little closer to home. When they were his age, John’s parents moved to Adelaide, Australia to teach for seven years. “I felt it was important to go and see how my parents lived when they were my age and starting a family” he explained. So, from January to August 2008, he studied at ANU, the same school as Crystal. John stayed with an Australian host family that he described as “extremely helpful and supportive.”

Before leaving, John said he thought Australia would have a different lifestyle with a different tempo. He was right! John explained how at ANU, each class includes a weekly four-hour practical designing research plots, collecting data, and producing results in the field in preparation for a final project. “I find this a much more relevant and applicable way of determining when students are ready for the work environment,” he said, adding that classes are “a blast!”

Though he had a great time, John did encounter some difficulties. His visa was not processed in time for his departure, so he was forced to apply for his student visa while in Australia, which involved tedious meetings with immigration officers and a physical exam. Still, he said, “This exchange was the best thing I could have done!”

OSU’s stellar forestry program makes Corvallis a popular destination for foreign exchange students as well. Kate Sheehan studied at OSU for the 2008 spring term. She is a student in Adventure Ecotourism at Charles Sturt University in Albury-Wodonga, New South Wales, and hopes to work in land management, while giving tours of the forests and coral reefs of Queensland, Australia.

Kate liked her abroad experience so much that she decided to stay for the summer of 2008 to work at a camp in Washington. “Studying abroad has been an amazing experience which has been life changing in many ways,” she said. “Although it may sometimes be seen as an expensive experience, the experience itself is priceless.”

A semester (or more!) abroad has many benefits. John loved the hands-on style of the Australian courses. Kate’s favorite part of her trip was the special friendships she forged with her American peers, and she liked the opportunity to take courses her own university does not offer. Crystal enjoyed her immersion in a different culture and the extracurricular clubs offered. Each student has the opportunity to tailor his or her own trip to be the most beneficial.

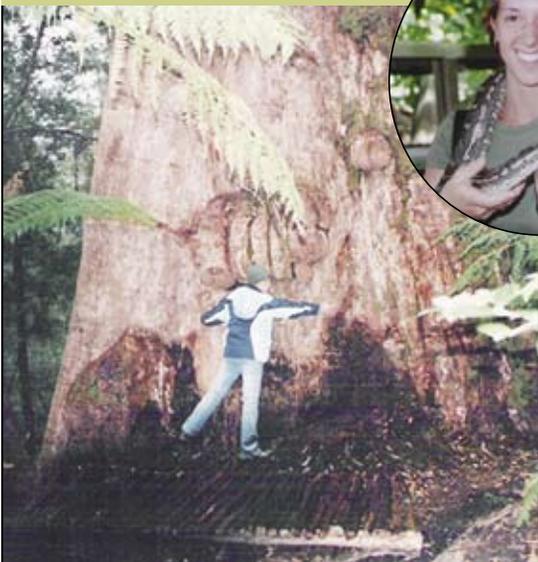
Though studying abroad has very few downsides, problems do occasionally arise. Paperwork for attainment of a visa, passport, and program acceptance can be tedious. Also, since term schedules often do not align and credit equivalents between schools can be difficult to determine, billing can be tricky. However, these problems are solvable and they pale in comparison to the benefits of schooling abroad.

Although the students featured in this article all studied in Australia or are from Australia, students may go virtually anywhere. For example, Justin Thomas, senior in FE/CE at the College of Forestry is currently studying in South Africa.

After graduation, the same trip abroad typically costs much more, lacks the intimacy with a foreign culture, and does not have the amount of support that a study abroad program provides. For those students interested in experiencing other cultures and forestlands, making lifelong friends, and forming professional contacts, now is the time. After all, when asked if they would recommend studying abroad to other students, Crystal, John, and Kate all responded with an enthusiastic YES!

To get started on the adventure of a lifetime, visit International Programs website at <http://oregonstate.edu/international/>.

Carrie Breckel graduated from OSU in March of 2008 with a BA in English. She studied Zoology at the University of Tasmania, Hobart in 2005.



Carrie hugs a giant tree in the Styx Forest in Tasmania; a giant snake hugs Carrie at a crocodile farm in Queensland, Australia.

NEW STUDY ABROAD OPPORTUNITY

Climate Change and Natural Resources Management: Insights from Scandinavia

This new, short-term OSU study abroad experience focuses on natural resources management and climate change with a heavy concentration on energy issues. Forestry, agriculture, and aquaculture issues will also be investigated. The experience, offered August 29–September 13, 2009, includes sites in Finland, Sweden, and Norway. Chris Knowles and Eric Hansen, faculty members in the College of Forestry, lead this adventure.

Please visit the website for more information (<http://woodscience.oregonstate.edu/faculty/hansen/StudyAbroad.html>) or send questions to OSU.Scandinavia.09@oregonstate.edu.

GRADUATION DAY, 2008



Students, faculty, staff, family, and friends gathered in the Peavy Hall Courtyard June 15 to celebrate the 2008 Oregon State University Commencement with the annual College of Forestry Brunch.

The College had much to celebrate this year, with 41 advanced degrees and 133 undergraduate degrees awarded. The graduate degrees included 11 Doctor of Philosophy, 28 Master of Science, and 2 Master of Forestry. This includes 8 Forest Engineering students, 11 Forest Resources students, 15 Forest Science students, and 7 Wood Science & Engineering students.

One hundred and thirty-three undergraduate students received Bachelor of Science degrees during this academic year: 8 in Forest Engineering, 2 in Forest Engineering/Civil Engineering, 15 in Forest Management, 62 in Natural Resources, 22 in Recreation Resource Management, 12 in Wood Science and Technology, 11 in Outdoor Recreation, Leadership, and Tourism, and 1 in Forest Operations Management—the first in this major. Of these baccalaureate students, 98 completed their degree on the Corvallis campus, 14 at the Cascades campus in Bend and 21 via on-line distance delivery coursework.

The College is very proud to note that 45 students from this exceptional class graduated with academic distinction. Gail Jeanine Woodside (NR) graduated with an Honors Bachelor of Science. Graduating *summa cum laude* were Emily Catherine Boling (NR), Brian J. Fisher (NR), Jenna Lee Lindbo (ORLT), Michael Burke Logan (NR), Marlies Lueppges (ORLT), and Kellie Suzanne Scofield (NR).

Magna cum laude graduates included Claudia R. Broderick Adkins (NR), Brenton Leroy Chose (RRM), Esther Rose Emeny (NR), Kirsten Andrea Fletcher (ORLT), Evelyn M. Jackson (NR), Ryan J. Jones (RRM), Rachel Suzanne Kollen (WST), Theodore Mark Kowash (FE), Angela M. Losasso (NR), Cody Allen Mattox (WST), Sandra Ellen Piltz (NR), Nicole Rochelle Rabbiosi (NR), Bryan Wallace Tower (NR), Bethany Lea Vogeney (NR), Chris B. Weekly (NR), Teresa Olive Wicks (NR), Peter C. Young (NR),

Graduating *cum laude* were Julie Lynn Balter (NR), Michelle L. Clark (NR), Johnny Albert Collin (FE), Jason Allen Evans (WST), Tina Greenawalt (NR), Kimberly Alice Henslee (NR), Jorich John Horner (ORLT), Cassandra Maureen Hummel (NR), Elizabeth Ann Lohman (NR), Anica Moriah Mercado (NR), Joy Christine Morton (NR), Jeffrey T. Myers (ORLT), Zachary Allen Peterson (FM), Bradley Joseph Reding (FM), Nadja Rebecca Schmidt (NR), Jarod James Seaman (NR), Shannah Janelle Selland, (RRM), Lori Jean Summers, (NR), Cary Ryan Swain, (FM), Kyle Nolan Whitham (NR), and Richard William Young (RRM)

Congratulations to all our College of Forestry graduates! We wish you the very best as you go forward in your lives and with your careers.

Successful College of Forestry Graduate Students

Dzhamal Amishev, PhD in Forest Engineering,
"In-Forest Log Segregation Based on Acoustic Measurement of Wood Stiffness"

Dan Donato, PhD in Forest Science,
"Forest Vegetation and Fuel Dynamics following Stand-replacing Wildfire, Re-burn, and Postfire Management in the Siskiyou Mountains, Oregon"

Jeffery Hamann, PhD in Forest Engineering
"Optimizing the Primary Forest Products Supply Chain: A Multi-Objective Heuristic Approach"

Alicia Kiyvra, PhD in Forest Engineering
"Assessing the Sustainability of Management Practices for Planted Forests across an Environmental Gradient in New Zealand"

Julian Licata, PhD in Forest Science
"Use of a Process-based Model to Compare Carbon and Water Fluxes in Young and Old-growth Douglas-fir/Western Hemlock Forest Stands"

Anand Mangalam, PhD in Wood Science
"DNA Based Artificial Nanostructures: Directed Assembly of Cellulose Nanocrystals into Advanced Nanomaterials"

Christina Olsen, PhD in Forest Social Science
"Citizen-Agency Interactions: An Investigation of Postfire Environments"

Rajat Panwar, PhD in Wood Science
"Corporate Social Responsibility in the Forest Products Industry: An Issues Management Approach"

Robert Slesak, PhD in Forest Engineering,
"Soil Respiration, C and N Leaching, and N Availability in Response to Harvest Intensity and Competing Vegetation Control in Douglas-fir Forests of the Pacific Northwest"

Christopher Surfleet, PhD in Forest Engineering,
"Uncertainty in Forest Road Hydrologic Modeling and Catchment Scale Assessment of Forest Road Sediment Yield"

Jonathan Thompson, PhD in Forest Science,
"Historical Disturbance Regimes as a Reference for Forest Policy: A Simulation Experiment in Oregon's Coast Range"

Dave Woodruff, PhD in Forest Science
"Height-Related Trends in Structure and Function of Douglas-fir Foliage"

Francisca Belart, MS in Forest Engineering,
"Evaluation of a Prototype NIR System for Douglas-fir Wood Density Measurement"

Yohanna Cabrera-Orozco, MS in Wood Science
"Improving the Durability of Second Growth Timbers of Naturally Durable Species"

Ted Downs, MS in Forest Science
"The Phytotoxic Effects of Herbicide and Adjuvant Application by Physiological Timing on the Woody Shrub Salal (Gaultheria shallon)"

Christopher Gabrielli, MS in Wood Science
"Chemical Modification of Wood: Dimensional Stabilization of Viscoelastic Thermal Compressed Wood"

Brennan Garrelts, MS in Forest Science
"Stand Development after 20-years of Growth in Douglas-fir and Red Alder Mixtures"

Christopher Gilliland, MS in Natural Resources Policy & Law

"Assessing Trail Inventory Methods: A Pilot Study to Guide Rocky Mountain National Park Managers"

Alan Kirschbaun, MS in Forest Science
"Mapping Pinyon and Juniper Mortality in Arizona and New Mexico using Landsat Imagery"

Lewis Leatherman, MF in Forest Products
"Log Cost Allocation for Multiple Mill Merchandising Systems"

Michael Lewis, MS in Wood Science
"Performance of Wood Frame Wall with Thin Shell ECC Shear Panel"

Noah Matsumoto, MS in Wood Science
"The Fracture Toughness of Medium Density Fiberboard and Other Fiber Bridging Composites"

Mark Nable, MS in Forest Science,
"Establishment and Growth of Natural and Planted Conifers Ten Years after Overstory Thinning and Vegetation Control in 50-year-old Douglas-fir Stands"

Daniel Norlander, MS in Forest Science
"Effect of Site and Silvicultural Treatment on Insect Pests and Diseases of Young Ponderosa Pine"

Dirk Pflugmacher, MS in Forest Science,
"Remote Sensing of Forest Above Ground Biomass using the Geoscience Laser Altimeter System"

Dorian Calderon Sanchez, MF in Forest Engineering,
"Forestry in Colombia Reality and Perspectives and Optimization of Forest Transportation Scheduling in Smurfit-Kappa Cartón de Colombia S.A.- Forestry Project, Southwestern Colombia"

Alyssa Shanks, MS in Forest Economics
"Carbon Flux Patterns on U.S. Public Timberlands under Alternative Timber Harvest Policies"

Michael Taylor, MS in Forest Science,
"Effect of Plant Date on Subsequent Seedling Field Performance"

Aaron Thiel, MS in Forest Science,
"Nitrogen Dynamics across Silvicultural Gaps in Young Forests of Western Oregon"

Cheney Vidrine, MS in Wood Science
"Copper Compounds for Durable Composites: Effects on Material Properties"

Julie Woodward, MS in Natural Resource Education and Extension
"Developing the 'Exploration of Oregon Forests: High School Modules'"

Congratulations!



2008 INITIATES

Five students from the College of Forestry were among the new members initiated into the Oregon State University chapter of Phi Kappa Phi, the nation's oldest and largest all-discipline honor society, in May of 2008. The Greek letters represent the motto, "Philosophia Krateito Photon," translated as "Let the love of learning rule humanity." The society's mission is "to recognize and promote academic excellence in all fields of higher education and to engage the community of scholars in service to others."

The College of Forestry proudly congratulates the following new members of Phi Kappa Phi:

JUNIORS

Mark David Mathre (FE/CE)

SENIORS

Richard William Young (RRM)
Shilah Kathleen Olson (NR)

GRADUATE STUDENTS

Ryan Patrick Gordon (FR)
Garrett Wister Meigs (FS)

FORESTRY STUDENTS HONORED BY OSU

Several College of Forestry students received awards from Oregon State University at the 2008 All University Awards Event on May 21, 2008.

Senior Amanda Gladics (NR) and sophomore Claire Rogan (FE/CE) received the Drucilla Shepard Smith Scholastic award, which recognizes students who have maintained a perfect 4.0 GPA. Freshman Jeremy Bittner (RRM) received the Clara H. Waldo and E. A. Cummings Outstanding Student Award, and freshman Kelly Egan (FE) and senior Anica Mercado (NR) received honorable mention. The Waldo-Cummings Award is based on exceptional academic and extracurricular achievements.

The College of Forestry very proudly congratulates these outstanding students!

COLLEGE OF FORESTRY AWARDS CEREMONY

The College of Forestry Student Awards Ceremony took place on May 9, 2008, and was followed by an ice cream social for students, family, faculty, and staff.

Dean Hal Salwasser began the event by recognizing members of student clubs, student organizations, and the Logging Sports Team for their dedication and contributions to the College.

Throughout the academic year, student clubs hold a variety of fund-raisers, as well as attend tours or host lecturers to complement their classroom experiences. The Logging Sports team competed in regional and national competitions, placing among the top in many events. The Ambassadors for Agricultural, Forestry, and Natural Resources traveled to high schools and college fairs throughout Oregon, giving presentations to introduce young people to the opportunities provided by a college education and encouraging them to consider careers in the natural resource fields. Their efforts not only help bring prospective students to campus, but encourage them to de-

cide on an educational future with the College.

Students involved in clubs, organizations, and activities "exemplify the hard work, ethical standards, and professionalism we promote through the College of Forestry's Code of Conduct," Salwasser said. "We thank you for all your hard work and commitment—the College greatly appreciates your efforts."

COLLEGE AWARDS

Each year, the College of Forestry gives four special awards to outstanding students who have made significant contributions and/or excelled academically.

The Pack Essay Award was established several decades ago by Charles Lathrop Pack to encourage sound communication skills for forestry and natural resource professionals. Pack Essays are restricted to natural resources and forest products-related topics submitted by undergraduate students enrolled in the College of Forestry. Essays are judged by a panel made up of professorial faculty, and rankings are based on creativity, ability to conceptualize ideas, originality in the analysis of resource problems, enjoyable writing that brings issues to life, and excellent grammar and writing style. The Pack Essay Award winner receives \$300 and a College of Forestry pen.

This year's Pack Essay Award went to Brenda Fogdall for her essay, "Colorado Basin Management: New Problems, New Solutions." Brenda is a Natural Resources Distance student who resides in Idaho. Congratulations to Brenda for her excellence in writing!

The Kelly Axe Award, presented by the students of the Forestry Club, is awarded to the graduating senior who helps or cooperates most behind the scenes with teachers, in club projects, and with fellow students. This award is unique in that the recipient is one who generally receives little recognition for all his or her efforts.

This year, the Kelly Axe Award went to Ashley Blanchard (WST). Ashley was

active in the Forestry Club and the OSU chapter of the Forest Products Society, serving as treasurer for 2007-2008. Congratulations, Ashley, and thank you for your positive contributions to our forestry community!

Each year, the College usually recognizes one senior who has demonstrated outstanding service to the College or University, with the Harold Bowerman Leadership Award, named for Hal Bowerman, class of '31. This year, the College proudly honored two students with this prestigious award. The students selected best exemplify the "Fernhopper Spirit" through demonstrated leadership, outstanding contributions, and enthusiastic participation in student club activities and College programs. Nominations are solicited from faculty, staff, and students, and the selection of the award is made by the College's Curriculum and Advising Committee. The award winners received a plaque and a cash award deposited to their student accounts.

Congratulations to Rachel Kollen (WST) and Jonathan Kerber (WST), the 2008 recipients of the Harold Bowerman Leadership Award.

The Paul and Neva Dunn Outstanding Senior Award, named in honor of the College's former Dean and his wife, is based on high scholastic achievement combined with potential for professional ability. Departments are invited each spring to nominate their top graduating seniors. Screening is based on GPA, how the student challenged him- or herself academically, departmental endorsement, the student's resume, and letters of recommendation. The recipient receives a cash award, as well as a plaque.

Congratulations to Emily Boling, the Paul and Neva Dunn Outstanding Senior Award winner for 2008.

This year, the College recognized exceptional students in each of our degree programs through the Outstanding Student awards. The recipients of these awards receive a special certificate, an engraved College of Forestry pen, and our heartfelt congratulations. The Out-

standing Student recipients were as follows: Forest Engineering/Civil Engineering, Ted Kowash; Forest Management, Zach Peterson; Recreation Resource Management, Ryan Jones; Tourism & Outdoor Leadership, Marlies Luepges and Kirsten Fletcher; Wood Science & Technology, Rachel Kollen; Natural Resources, Emily Boling.

FELLOWSHIPS AND SCHOLARSHIPS

Each year the College of Forestry is honored and privileged to award graduate fellowships and undergraduate scholarships to deserving new and returning students. College of Forestry Fellowships honor top incoming and returning graduate students, nominated by their departments. Thirty-seven students, at both the doctoral and master's level, were selected to receive fourteen college fellowships totaling over \$100,000 for the 2008-2009 academic year. Fellowships ranged in value from \$500 to \$6,000 dollars, with some students receiving multiple awards.

For the 2008-2009 academic year, 103 students were selected to receive a total of 73 scholarships totaling over \$400,000 for the 2008-2009 academic year. The scholarships ranged in value from \$500 to \$6,500, with some students receiving more than one award.

As Dean Hal Salwasser notes, however, these awards are only possible through generous contributions and continued support from scholarship and fellowship donors. "It is only through their gracious generosity that our fellowship, scholarship, and other programs of the College are possible," he said. "I don't think there's another college on campus that has the show of support for its students than the College of Forestry. Through the generosity of our donors, the College has been able to award over \$500,000 in fellowships and scholarships for the 2008/2009 academic year—truly amazing!"

FACULTY AWARDS

The students of the College of Forestry select and present two special awards to members of the faculty each year. The Aufderheide Award for excellence in teaching went to Professor Robin Rose (FERM). The Xi Sigma Pi/Julie Kliewer Mentor Award for excellence in mentoring went to Assistant Professor Temesgen Hailemariam (FERM).



Robin Rose (top); Temesgen Hailemariam.

**Congratulations
to all our award
winners and
scholarship
and fellowship
recipients!**

WOW



Women Owning Woodlands Network continues to succeed

By Carrie Breckel

“We all have something to learn, we all have something to share.” This quote from a member perfectly describes the Women Owning Woodlands Network, or “WOWnet.” This Oregon-based group places women who own or manage woodlands in contact with each other to facilitate the spread of information and experience . . . and it all started with Nicole Strong, Master Woodland Manager and Woodland Owner Workshops Coordinator of the OSU Extension Forestry Program.

Just over two years ago, Strong and fellow forester Sara Leiman lamented the lack of informational resources readily available to the growing number of female woodland owners. They rounded up a small number of women who formed WOWnet in the attempt to connect women to the resources available, including each other. “Sometimes woodland owners, especially new ones, can feel kind of isolated and lost,” said Strong. “We thought this would be a great venue for making critical social and technical connections.”

Who knew that just two years later, WOWnet would have boomed and spread into six separate geographical groups, including Clackamas, Polk/Yamhill, Benton/Linn, Lane, Douglas, and Coos/Curry! In 2007, 238 women attended WOWnet sessions. “This grew so fast that I am not trying to expand just yet,” Strong said, “maybe in 2009.”

Members of WOWnet have already won two prestigious awards for their participation in the network. In 2006, Strong and WOWnet coworker and College of Forestry alumnus Elissa Wells (BS, FM 1999; MS, FR 2002) received the Dean’s Award for “Outstanding Achievement in Extended and Continuing Education” for their part in developing this exceptional program. In 2007, Sara Leiman was recognized with the Oregon Governor’s Volunteer Award for her leadership in WOWnet. Considering the

number of women the network has already helped, the awards were well-deserved.

So what exactly does WOWnet do? According to Strong, the network encompasses three specific goals: (1) Recognize the growing role of women forestland managers; (2) Empower women by raising their basic forestry and decision-making skill levels through hands-on, fun educational opportunities; and (3) Encourage communication among women woodland managers through the development of statewide and local networks.

Oregon has many resources for small woodland owners (OSU Extension Service, for example), but the key is to know how to access them. “We strive to connect women to those opportunities,” Strong explained, “and hopefully prepare them in a way that they can optimize those experiences, and feel comfortable sharing their vision and communicating their needs to those groups.”

WOWnet achieves these goals in a few ways. First, the network is divided into local groups that meet about four times per year. Each meeting is typically hosted by one group member and is kept in an informal setting. An unofficial rule is “NO PPT” (no PowerPoint), said Strong. Keeping things “outdoors and applied” provides a better learning environment and learning new information is what these meetings are about after all. As for membership fees, Strong jokes that members may have to pay in food, since many meetings are potlucks. However, no real membership fees are due, because WOWnet is fully funded by a grant from the Oregon Forest Resources Institute (OFRI).

Second, WOWnet sticks to its grassroots origins. Each local group decides its own priorities and schedules its own meeting topics according to what they need, which keeps information relevant to the group members. Occasionally an expert on their chosen topic will attend a meeting to lead discussion.

INDEED!

Third, a lot of mentoring occurs in WOWnet. The experience of each WOWnet member is valuable information for all, but only if it is accessible. “Members with experience in a certain topic help those to whom that is new,” Strong explained, “WOWnet allows those connections to occur.”

Finally, WOWnet makes use of various means of communication to reach out to members. An OSU listserv and Yahoo! group page are used to spread information, ask questions, and post future meetings. Though the online groups are “members only,” everyone is welcome to join, even men! Some female members hope to own woodlands in the future, some already manage or own woodlands, and some take their male relatives and friends to meetings. Strong said, “We embrace everyone who is interested in learning or supporting our program objectives.”

When asked about the benefits of WOWnet, Strong replied, “We respect diversity in forest management goals, values, and beliefs, but we encourage informed decision-making. Informed individuals lead to strong informed woodland manager communities and that means healthy, resilient, and productive forests in Oregon.” That is of course something we all want to see.

For more information about WOWnet, contact Nicole Strong at nicole.strong@oregonstate.edu.



Photos: (top left) pruning session; (top right) chainsaw safety session; (bottom) participants learning how to measure tree height using woodland owner sticks.



What's in a Name?

Susan Sahnou explains the change from OFEP to ONREP

By Erin Heim



LeeAnn Mikkelsen, Susan Sahnou, and Kari O'Connell

What's in a name? We can learn a lot from a name and the director of what used to be called the Oregon Forestry Education Program (OFEP), Susan Sahnou, knows it. For over 25 years, OFEP helped K-12 educators learn about Oregon's forests and forest resources. The program is still doing just that, but OFEP has changed its name to the Oregon Natural Resources Education Program (ONREP).

"We changed the name to reflect more accurately, what we are doing," says Sahnou. "Our programs focus on building educators' understanding and knowledge about the diversity and complexity of Oregon's ecosystems, with emphasis on forest ecosystems. It's about the trees, plants, animals, water and everything that's connected to them that makes a healthy ecosystem."

The name change better reflects the broad natural resource focus of the program. While Oregon forests are still a large part of the program, the new name is intended to appeal to ONREP's audience—K-12 educators. The change is, in part, a marketing endeavor. With a shift in the focus from forests to natural resource ecosystems, they hope educators will see that the program can serve their broad needs and interests in teaching about natural resources. ONREP wants educators to see them as a source for workshops and professional development opportunities that include water, soils, animals and trees—in short, forest as a whole. Although the OFEP was doing just that, the new name more accurately describes the program and provides a more holistic view of forest systems.

Another reason for the name change is the desire to better connect with

the national programs that ONREP represents, such as Project Learning Tree and Project WILD. Changing the name demonstrates the program's broad focus on natural resources and demonstrates to ONREP's partners and funding agencies that the program is managing to reach educators interested in teaching their students about all the components of a forest system.

In addition to a new name, ONREP has a new, 15-member advisory committee that includes representatives from the Oregon Department of Fish and Wildlife, the Oregon Department of Forestry, and others. The committee consists of a diverse group reflective of the extensive natural resources foundation of ONREP. The committee is also representative of the audience it serves, boasting faculty from pre-service, K-12

education, and a representative from the Oregon Department of Education.

ONREP has already begun giving broad-based workshops. An example includes “Forest to the Sea,” a watershed workshop that looks at forests, water, and wildlife, all within a watershed. Another example is “Writing in the Woods.” Held at H.J. Andrews Experimental Forest, this workshop focuses on how writing relates to the forest and research. For the past two years, the Whole Schools Program has worked with a school or district to incorporate natural resources across all grade levels and all subject areas. The idea is to connect indoor learning with outdoor learning and give teachers the tools, resources, and skills needed to have the confidence to take students outdoors.

In 2002, when Sahnaw became the director, she took responsibility for ensuring that the program reflected best practices in education, the content was

grounded in science-based information and was fiscally and structurally sound. It is also important to Sahnaw that the program maintain the flexibility to stay relevant. To accomplish this she works closely with staff, stakeholders and partners while acting as a conduit between the national offices and marketing partners.

LeeAnn Mikkelson, Program Coordinator, came to work for the program in 2005 and manages the development and delivery of programs to K-12 educators. She supports 40 plus program facilitators in delivering over 45 workshops a year. New to the office is Kari O’Connell, who works to connect secondary teachers with research. She pursues opportunities for educators to engage with field researchers and focuses on how research on the ground relates to scientific inquiry. Kari is also helping to generate funding to expand this part

of the program. Another new face to the office is Irene Schoppy, who is helping ONREP to keep up with the many demands of billing, tracking information, and data entry.

Yes, there is a lot in a name, and while still focusing on the core values which made the OFEP a success in the past, the staff and advisory committee of ONREP is pleased with its new moniker and energized by all the positive changes that have come with it. Sahnaw believes the program has solid partners—newer and older—to provide sustainability and stability to the program. “The advisory committee is strong and excited about helping to do the work to move the program forward,” she says.

Erin Heim is a graduate student (MS) in the Department of Forest Ecosystems & Society and an alumna of the College of Forestry (NR, 2004).

2008-2009 LECTURE SERIES

STARKER LECTURE SERIES: SUSTAINING FORESTS, HOMES, AND COMMUNITIES

The upcoming Starker Lecture Series will address the issue of sustainability from a broad perspective, ranging from sustainable production and use of forest products to maintaining strong rural communities and the working forests on which they depend. Program speakers will examine key approaches for promoting sustainability, such as forest management certification, green building standards and forest-dependent community initiatives. The series is expected to extend over Winter and Spring Quarter 2009. Please check the Starker Lecture Series website (<http://starkerlectures.forestry.oregonstate.edu/>) for program updates and other information, or contact Nathalie Gitt at 541-737-4279 or nathalie.gitt@oregonstate.edu.



International Political and Natural Fire Fighter

Alum takes forestry skills Down Under

By Carrie Breckel

Wildland fires do not care about international boundaries; they strike all around the world. Luckily, there are also foresters like College of Forestry alumnus Bodie Shaw who are dedicated to fire management and international sharing of knowledge to improve land management.

Shaw (BS, forest management, 1993, MS, forest resources, 1996) has a lifelong mission for the betterment of land and fire management that has taken on a political and international front in recent years. He is a member of the Confederated Tribes of the Warm Springs Indian Reservation in central Oregon, where he grew up practicing fire and land management with his grandfather and father. Shaw has held a number of forest management and leadership positions with a political emphasis in both Oregon and in Washington DC., working for a member of Congress and at the national office headquarters for the Bureau of Indian Affairs (BIA).

Shaw now acts as Deputy Director of the Wildland Fire Management branch of the BIA, where he oversees the allocation of \$200 million of federal budget money across the nation for preparedness, hazardous fuels, prevention, and suppression of wildland fires. He also oversees the writing and implementation of new wildland fire management and safety policies. "I enjoy working with the various tribes across the country," he said. "The ability to see measurable, positive outcomes from your work keeps you focused and appreciative for this opportunity."

The state of Victoria, Australia has had very severe bushfire threats from late 2006 to present due to multiple years of rain deficiency and record high temperatures. In response to a request for aid, on December 28, 2006 the United States sent 114 personnel with Shaw as Chief of Party to Melbourne, Australia. "My fires were



Bodie Shaw. Photo courtesy of The Age Newspaper, Melbourne, Victoria, Australia.

really more political than natural for the month I was there," Shaw said, "Much of my time was spent on dealing with liability issues for our folks." Although Shaw did occasionally make it out to the bushfires on foot and by helicopter, most of his work was done with the U.S. Embassy in the capital city of Canberra and the Consul General's Office in Melbourne. The United States provides insurance for international firefighters on its soil and Shaw's primary responsibility was making sure that the American firefighters in Australia were granted the same protection. "That was a tremendous undertaking," Shaw said, "but we were successful prior to the majority of our forces arriving."

In reference to the combined bushfire fighting efforts of Canada, New Zealand, and Australia, Shaw said, "The opportunity to work on the international stage was second to none. We are only separated by political, social and geographic challenges; some natural, some man-made. Ultimately, whether or not we realize it, the globalization of resource management is occurring."

With this in mind, Shaw began a new project in 2007: an international fire fighting exchange program with New Zealand and Australia. The primary goals of the program include the fostering of cultural exchange, strengthening of international bonds, expansion of professional and personal experience, and exchange of knowledge and methods to better land management. Shaw explained, "This new program helps codify a wonderful international opportunity."

There are many differences between Australian and American fire management procedures, which make the passing of knowledge ever more beneficial. According to Shaw, Australia has many fast-moving but short-duration fires like the U.S.; however, Australia has fewer long duration fires, due in large part to fuel type differences. Australia also has far fewer fires caused by lightning. He says that residents threatened by fire, as well as the firefighters themselves, are more responsible for their own safety than in the U.S., which offers more help through safety officers, shelters, and other fire services. However, assistance in preparation of residents for the possibility of bushfires is more proactive in Australia. Also, there is a higher reliance on volunteer firefighters and they tend to be more effective and better organized in Australia, Shaw says. He mentioned that Australia relies more on dozers and engines and less on the hand line for fire suppression. Despite these differences, both countries have a strong history of support for wildland fire suppression and face many of the same fire and land management issues.

Shaw was invited back to Washington, D.C., by Secretary of Interior Dirk Kempthorne in May 2007 to make the announcement of the international exchange program. Joining him were the Australian, New Zealander, Canadian, and Mexican ambassadors, as well as the



NASA Landsat image of Australia bushfires; (from left), Bodie Shaw; his wife, Heather Shaw; Secretary of the Interior Dirk Kempthorne; and Delvis Heath, Chief of the Warm Springs, at May 2007 reception. DOI photo by Tami Heilemann. Fire photo courtesy of Herald Sun Newspaper, Melbourne, Victoria, Australia.

then-Secretary of Agriculture, Mike Johanns. While in Australia, Shaw experienced some unexpected OSU reunions. Over dinner one night, Shaw and the New Zealand liaison Paul Baker discovered that they are both College of Forestry alumni. Baker was a part of the Forest Engineering Institute (FEI) program in 1991 under the directorship of Professor Loren Kellogg (FERM). Baker is “just a wonderful gentleman and quite a forester,” Shaw said, “The both of us make a very strong OSU presence.” Shaw also ran into Nick Lunde (Forest Management, 1975), who was also working overseas.

“If there is one thing that resonated well with me during my time at Oregon State University,” Shaw said, “it is the fact that were are just a small part of the global environment. As professional natural resource practitioners, we have the wonderful opportunity, if not obligation, to not only teach, but learn from our global counterparts. This program is yet another opportunity to network regarding new concepts internationally.”

In August of 2008, Shaw went back to Australia for six months with his family to develop new agreements with Australia and New Zealand to further facilitate the natural resource management exchange. Eventually, the program will provide opportunities for forest managers, range conservationists, and natural resource managers to participate.



Sparky facts about Aussie trees

“Bushfire” refers to wildland fires in areas of scrub, forest, or grassland and is used in both New Zealand and Australia.

“Serotiny” is the plant strategy of storing seeds in hard casings until fire melts the resins holding the case shut. The seed is then released onto an ashy landscape with less competition.

Aborigines in Australia for over 40,000 years practiced controlled burning to reduce the severity of natural fires, keep a healthy composition of animals, and facilitate hunting.

“Gum trees” refers to some of more than 700 species of eucalyptus plants that dominate Australian flora. Many are dependent on fire for dispersal and regeneration.

Australia’s characteristic blue haze is due to oil that escapes into the air from gum trees.



New Post for Forestry Alum

College of Forestry alumna Julia Lauch (FM, 2007) has been serving as the Assistant Unit Forester with the Pendleton Unit of the Oregon Department of Forestry since March of 2008 fire season. Lauch’s previous assignment was with the Western Lane Unit, where she worked as a Forest Officer dealing with fire suppression, fire prevention, training, and other related programs. While at OSU, she served as a Forest Policy Intern in Washington D.C. for the National Association of State Foresters in 2005 and as a Student Director for the Ambassadors for Agriculture, Forestry, and Natural Resources. Lauch is a member of the Society of American Foresters and of the Forestry Honor Society, Xi Sigma Pi.

Giustina gift establishes new forest management professorship

By Sara Zaskie



Forest Management class field trip to the B&B Complex Fire site near Three-fingered Jack.

The late Nat Giustina was an icon in Oregon forestry. He helped steer his family's timber and wood products business through dramatic changes in the industry. He was also among the visionaries, along with his friend L.L. "Stub" Stewart '32, who advocated for more responsible stewardship of private timber lands.

To honor this legacy, Nat's wife, Jacqueline, and his children decided to designate a \$3 million gift to create the N.B. and Jacqueline Giustina Professorship in Forest Management. The endowed forestry position will fund a top faculty member and provide significant resources for associated research, education, and outreach activities.

"This gift will help ensure that the College can continue its leadership in sustainable forest management and the related fields of water quality, and fish and wildlife habitat," said Dean Hal Salwasser.

Before he passed away in 2005, Giustina asked his family to make a gift to The Campaign for OSU, which was formally announced two years later. In addition to the forestry professorship, they also designated another \$1 million to create an endowed professorship in turf management, a gift that honors Nat Giustina's love of golf.

"My father had always been supportive of Oregon State, and he really wanted to be a part of the campaign," said Larry Giustina, '71, the current president of Giustina Land and Timber Co., and chair of the College of Forestry's Board of Visitors. "The family came together, and we decided to direct the gift to two areas he loved."

The Giustinas' roots in forestry stretch back to the 1930s when Nat Giustina's father, Ermino, and his three brothers first established a planing mill in Eugene. Although Nat majored in mechanical engineering at OSU, he leapt right into the business after he graduated in 1941 and took over as president and general manager in 1948. He became a leader in the field, serving on many state and national advisory boards. He was also very active with the College of Forestry.

"Nat was a guy you could count on," recalled Dean Emeritus George Brown. "He was very in tune with what was going on in the state and the industry. He was a very far-sighted person, not mired in the past. He looked to the future."

Ward Armstrong, a 1960 OSU forestry graduate who knew Giustina from his work on the Oregon Forest Industries Council, called the gift a wonderful statement by the family. "Nat was so committed to OSU, the College of Forestry, and to higher education—it's tremendous that his name would be part of such a legacy. He would be absolutely thrilled."

Support for faculty is a top priority for the College of Forestry during the Campaign. For more information contact Jennifer Niedermeyer at 503-553-3409 or Jennifer.Niedermeyer@oregonstate.edu.

VENTURE DEVELOPMENT FUND: INSPIRE INNOVATION WITH A TAX-WISE GIFT



By Sara Zaske

Last December, Duane and Barbara McDougall made a \$50,000 gift to Oregon State University—for only \$2,500.

They gave to OSU’s Venture Development Fund, which supports the commercialization of research at Oregon State and provides donors with special tax benefits. Oregon taxpayers who contribute to the fund are eligible for a 60 percent state tax credit in addition to a federal tax deduction. For some donors, that can mean as little as a five percent out-of-pocket cost for their gift (see chart).

“The Venture Fund provides two great opportunities: the opportunity to help make ideas generated at OSU commercially viable and the opportunity on a personal basis, to realize tax savings,” said Duane McDougall, who is the former CEO of Willamette Industries and a 1974 accounting graduate. “There are two benefits: most importantly, help OSU and secondarily, help your own tax situation.”

Because of gifts from many donors, OSU’s Venture Development Fund recently made its first round of awards, including a grant for a project led by wood science professor Kaichang Li to create a wood-adhesive from all renewable materials.

Li’s soy-based wood-adhesive, which eliminates the need for formaldehyde in wood-adhesives, is already in use commercially. With the venture fund award, Li is hoping to take the product a step further by replacing petroleum-based chemicals used in the adhesive processing with renewable materials. If successful, the

final product will not only be more environmentally friendly but more cost-effective, as its production will be less tied to the cost of oil.

Through gifts to OSU’s Venture Fund, donors can help more innovative ideas like this become commercial products, strengthening the state’s economy and improving lives.

For more information, contact Julie Brandis at 541-737-2900 or Julie.Brandis@oregonstate.edu. To calculate your tax savings, visit: campaignforosu.org/venturefund

How it works	
Donor Gift to OSU’s Venture Fund	\$50,000
Tax Benefits	
Estimated Oregon Tax Credit (60% of gift)	\$30,000
Potential Federal Income Tax Savings (assumes 35% tax bracket)	\$17,500
Estimated Net Cost of Gift to Donor	\$2,500

These calculations are for illustration purposes only. Donors should seek the counsel of a tax professional for specifics regarding their potential gift.

Photo of Kaichang Li by Cheryl Hatch, University Advancement, OSU.

Investing In Our Future

1868 Society

The 1868 Society was named for the year in which the legislature passed OSU's charter, creating Oregon's first state-supported college. By making such substantial contributions over time, members of the 1868 Society carry on OSU's proud legacy and help ensure an outstanding future for the university.

The following alumni of the College of Forestry are recognized as members of the 1868 Society for their cumulative commitments across the university.

Milton Harris Society

1926 OSU graduate and noted chemist, Milton Harris, gave the first \$1 million gift to OSU. Representing leadership giving at its finest, Harris Society members have made cumulative gifts of \$1 million or more.

\$1 million or more

Milton Harris '26
Thomas B. Barocan '64
Andy Morrow '37
Richard Strachan '78
Sam Wheeler '50

James H. Jensen Society

James H. Jensen was OSU president when the university's first donor recognition group was established in 1967.

Donors making cumulative gifts of \$500,000 to \$999,999 during their lifetimes are recognized in the Jensen Society.

\$500,000 - \$999,999

Marilyn Burris Graham '52 & Dan A. Graham '51
Jane Webster Newton '70 &
Michael Newton '59
Patricia & Darrell H. Schroeder '48

August Leroy Strand Society

August Leroy Strand, OSU president from 1942 to 1961, was instrumental in launching the OSU Foundation in 1947.

Strand Society members' cumulative gifts total \$250,000 to \$499,999.

\$250,000 - \$499,999

Gail A. & Kevin M. Russom, Jr. '82
Patricia '74 & Barte B. Starker '72
Marilyn J. '72 & Bond Starker '69
Roswell A. Ten Eyck '50

Sheila Griep Van Zandt '59 &
Edward F. Van Zandt '59

William Jasper Kerr Society

William Jasper Kerr served as OSU president from 1907 to 1934, a 25-year period marked by tremendous growth. Members of Kerr Society have made cumulative gifts of \$100,000 to \$249,999 during their lifetimes.

\$100,000 - \$249,999

Barbara Jones Brown '72 &
Michael V. Brown '73
Margaret Brundage Christie &
John L. Christie, Jr. '53
Phyllis & Dick Dahlin '65
Patricia & Jerry Doble '57
Brenda DeLong Gardner '42 &
John R. Gardner '43
Blair A. Holman '60
Jack H. Hunt '46
Karen J. '80 & Kenneth C. Jones '80
Wanda P. & Everett N. MacDaniels '50
Katherine W. & Lawrence C. Merriam, Jr. '58
Patricia J. & Jerry C. Olson '62
Judith L. '77 & John Sessions '79
Joyce Reusser Stuntzner '64 &
Ronald E. Stuntzner '64

2006-2007 Annual Support

The Honor Roll recognizes the College's annual supporters who have made outright gifts or pledge payments totaling \$1,000 or more between July 1, 2006, and June 30, 2007. Donors making new pledges will be recognized in the appropriate level as their payments are received.

\$10,000 or more

American Society of Plant Biologists
Associated Oregon Loggers, Inc.
Autzen Foundation
Thomas B. Barocan '64
Helen S. Carlson
Marcia Wiseman Coats '53
Forest Capital Partners LLC
Friends of Paul Bunyan Foundation
Gibbet Hill Foundation
Giustina Land and Timber Company
N. B. Giustina Foundation
Carolyn Keen Giustina '71 &
Larry M. Giustina '71
Harriett S. & Edmund Hayes, Jr.
Jeld-Wen Foundation
Jeld-Wen, Inc.
Johns Manville Corporation
Kennebecott Greens Creek Mining Company
Roberta Konnie
Microsoft Corporation

Estate of Alfred W. Moltke
Nature Conservancy
Jane Webster Newton '70 &
Michael Newton '59
Frederick W. Preston
Linda S. & John Shelk, Jr.
Elizabeth & Laurence G. Sprunt
Starker Forests, Inc.
Marilyn J. '72 & Bond Starker '69
Patricia '74 & Barte B. Starker '72
Richard Strachan '78
Joyce Reusser Stuntzner '64 &
Ronald E. Stuntzner '64
Frederick J. Swanson
Marion E. & John M. Swanson
Triad Machinery, Inc.
Tuktawa Foundation
Barbara F. & Wendell O. Walker
Doris & Richard H. Waring
Weyerhaeuser Company
Weyerhaeuser Company Foundation
Wheeler Foundation
Wollenberg Foundation

\$5,000 - \$9,999

Anonymous
BASF Corporation
Catherine A. & Jerry F. Behm '66
Constance W. & David L. Bowden '57
Barbara Jones Brown '72 &
Michael V. Brown '73
Patricia & Jerry Doble '57
Cornelius R. Duffie
Alvin L. Ewing '73
Ta-Yun Wu Fang '71 &
Henry H. Fang '71
Dodd Fischer
Freres Foundation
Brenda DeLong Gardner '42 &
John R. Gardner '43
General Electric Foundation
Giustina Resources
Guidance Foundation
Joy A. & Richard E. Hanson
Northwest Natural Resource Group LLC
Oregon Society of American Foresters
Judith L. '77 & John Sessions '79
Ann J. & William Swindells, Jr.
Joan Orr Waite '38
Anna Wiancko-Chasman & Paul Chasman

\$2,500 - \$4,999

Donna D. & Herbert H. Bosselman '55
Te M. Ching
Margaret Brundage Christie &
John L. Christie, Jr. '53
DuPont Company
Donna M. & C. W. Knodell '52
Metlife Foundation
Plywood Pioneers Association
Albert H. Powers
Society of American Foresters Coos Chapter
Phillip Sollins
Weyerhaeuser Company Foundation

\$1,000 - \$2,499

Lee Ayer
Curtis D. Baynes '86
Patty '75 & Ronald J. Bedient
Charles F. Gagliasso Trucking, Inc.
Yvon Chouinard
Marion E. & Larry M. Christiansen '51
Esther L. & Kenneth L. Conklin '64
Douglas W. Crandall '79
Robert P. Crane '81
Emerald Valley Thinning, Inc.
Diane Nurmi Freres '73 & Ted Freres '73
Laura M. & Donald J. Gagliasso
Carolyn & Frederick L. Green '53
Diane & James A. Hallstrom '74
Hampton Lumber Sales Company
Phyllis Gray Hann '42
Gabrielle & G. Adolf Hertrich
Hewlett-Packard Company
Karen L. Hoffman
Joelynn Hicks Keniston '76 &
James A. Keniston '76
Ann Anderson Mast '48
Chrissy & John R. Murphy
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Oregon Industrial Lumber Products, Inc.
Oregon Small Woodlands Association
Lane County
Patricia B. '53 & Robert E. Peterson '50
Mario and Alma Pastega Family Foundation
San Francisco Foundation
Kelli J. & Samuel E. Sanders '98
Judy Thielges
Timber Products Company
Transition Management, Inc.
Vanport Manufacturing, Inc.
Weyerhaeuser Company

2007-2008 Annual Support

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\$10,000 or more

Advanced Dynamics, Inc.
Autzen Foundation
Estate of Louis H. Blackerby
Boone and Crockett Club
Cathy Evans Brodie '71 & Jerry E. Brodie '71
Helen S. Carlson
Marcia Wiseman Coats '53
Sue Roderick Fisher '63 & Mike Fisher
Forest Capital Partners LLC
Jackie Giustina
N. B. Giustina Foundation
Carolyn Keen Giustina '71 &
Larry M. Giustina '71
Irene Giustina Goldbeck '74 & Erik H. Goldbeck
Janssen Pharmaceutica, Inc.

Jeld-Wen, Inc.
Roberta Konnie
Estate of Alfred W. Moltke
NCASI
Natalie Giustina Newlove & Robin Newlove
Jane Webster Newton '70 &
Michael Newton '59
Northwest Academic Computing Consortium
Oregon Forest Industries Council
Elaine J. '42 & Vitz-James Ramsdell '42
Resources For The Future
Royal Museum for Central Africa
Gail A. & Kevin M. Russom, Jr. '82
Schill & Seilacher Struktol
Schmidt Family Trust
SmithBucklin, Inc.
Elizabeth & Laurence G. Sprunt
Starker Forests, Inc.
Patricia '74 & Barte B. Starker '72
Richard Strachan '78
Targeted Growth, Inc.
Triad Machinery, Inc.
Jerry H. Walling
Weyerhaeuser Company
Wheeler Foundation
Anna Wiancko-Chasman & Paul Chasman
Willamette Valley Company
Wollenberg Foundation
WQI Ltd

\$5,000 - \$9,999

Catherine A. & Jerry F. Behm '66
Constance W. & David L. Bowden '57
Patricia & Jerry Doble '57
Beverly W. & Wayne W. Gaskins
Giustina Foundation
Dan Giustina
HM, Inc.
Phillip Sollins
Marilyn J. '72 & Bond Starker '69
Barbara F. & Wendell O. Walker
Nicholas Walrod

\$2,500 - \$4,999

Thomas B. Barocan '64
Boeing Company
Donna D. & Herbert H. Bosselman '55
Te M. Ching
Margaret Brundage Christie &
John L. Christie, Jr. '53
Carolyn & Frederick L. Green '53
Joy A. & Richard E. Hanson
Donna M. & C. W. Knodell '52
Metlife Foundation
Plywood Pioneers Association
Albert H. Powers
Monica J. & Michel J. Thevenon '70
Vanguard Charitable Endowment Program

\$1,000 - \$2,499

Lee Ayer
Irene E. & Allan E. Bankus '50
Curtis D. Baynes '86
Patty '75 & Ronald J. Bedient
James E. Brown
Marion E. & Larry M. Christiansen '51

Brenda C. & Robert J. Clark '58
Dodd Fischer
Carol Girt '62
Diane & James A. Hallstrom '74
James Hill
Karen L. Hoffman
Jim Brown Consulting Forestry LLC
Julia A. & P. Scott Jones
Joelynn Hicks Keniston '76 &
James A. Keniston '76
Koshare '95 & Stephen Lomnicki '95
Ann Anderson Mast '48
Lisa J. Anderson & Max W. Merlich '76
Katherine W. & Lawrence C. Merriam, Jr. '58
David M. Montgomery '69
Doris M. & Martin Nygaard '51
William F. Penney '53
Verlyne P. & Wayne H. Phillips
Mary Ann Hubbard Rombach '63 &
James L. Rombach '64
Janine & Hal J. Salwasser
Kelli J. & Samuel E. Sanders '98
Brigitte U. & Harley J. Smith '59
Marolyn Tarrant '48
Marian J. Tews
Warrenton Fiber Co., Inc.

In Memoriam

James H. Jensen Society

\$500,000 - \$999,999

Robert H. Mealey '36

August Leroy Strand Society

\$250,000 - \$499,999

David W. Blasen '47

2006-2007 Annual Support

\$10,000 or more

Marvin W. Coats '51
Orleen Koenecke Preston '44

\$2,500 - \$4,999

Kim Ching

2007-2008 Annual Support

\$10,000 or more

Marvin W. Coats '51

\$2,500 - \$4,999

Kim Ching

Thank you!

Every attempt has been made to ensure the accuracy of these lists. However, if you notice an error, please contact Penny Hardesty, Director of Donor Relations, OSU Foundation, Penny.Hardesty@oregonstate.edu or 541-737-1469.

In Memoriam

WOOD PRODUCTS AND CIVIC LEADER, JEAN MATER

Courtesy of Mater Engineering



In an era when women scientists were few and far between, a dynamic woman just under 5 feet tall helped create lasting improvements in the wood products industry. As stated by Hal Salwasser, “Her impact on the industry and on forestry practices in Oregon was just the opposite of her size.”

Jean Mater died at the age of 92 on Sunday, July 6, 2008. She was at her Corvallis home and surrounded by family members. Jean is survived by son James Mater of Portland and his wife, Sharon; daughter-in-law Catherine Mater of Corvallis; and four grandchildren. She was preceded in death by her husband, Milton Mater, and a son, Scott Mater.

Born Jean Marmorstein on June 18, 1916, in New York City, she attended Brooklyn College where she earned her bachelor’s degree. She earned a master’s degree in chemistry from Cornell University in 1940. She was married to Milt Mater in 1940. While he served overseas during the war, Jean helped to break down gender barriers working as a chemist at Bell Labs.

After the war, the Mater’s moved to Corvallis where they opened a small machine shop, and then worked side by side to build their business into a world leader in the forestry industry, recalled Hal. “She and her husband helped sawmills with a lot of efficiency improvements,” he said. “Mater Engineering was (also) a very early champion of what came to be known as sustainable forestry.”

In 1955 Jean earned her PhD in forest products chemistry from the College of Forestry. She published a number of books on forestry issues, including “Reinventing the Forestry Industry” in 1997. She became a strong advocate for the College of Forestry. “She was very active in giving us counsel, even when we didn’t ask for it. But

it was always welcome,” Hal recalled. Jean was recognized as a fellow of the Society of American Foresters, and was also honored by the Forest Products Society for her many contributions.

Mater took pride in her community and was very active in civic affairs. In 1974 she was elected president of the Corvallis Chamber of Commerce. Once again breaking gender barriers by being the first woman in Oregon to hold such a position. She was one of the leaders in overcoming community opposition to Hewlett-Packard’s plans to open a plant in Corvallis. “We wanted a clean industry that required educated people and would be pleasant to have and compatible with Corvallis,” she told the Gazette-Times in 1994. “We all said HP would lead to a lot of small satellite high-tech industries, which is exactly what happened.” Jean’s continuing civic leadership earned her recognition as Corvallis First Citizen in 1975 and Senior First Citizen in 2006.

Jean applied her leadership skills beyond the city. She filled advisory roles with the Governor’s Employment and Training Council, the Oregon Consortium, the OSU College of Business Advisory Council and the Private Industry Council. She also sat on the board of the Portland branch of the Federal Reserve Bank of San Francisco.

She is survived by son James Mater of Portland and his wife, Sharon; daughter-in-law Catherine Mater of Corvallis; and four grandchildren. She was preceded in death by her husband, Milton Mater, in 1991, and a son, Scott Mater, in 2002.

Condensed from a story by Bennett Hall published in the Corvallis Gazette-Times on July 7, 2008 and reprinted with permission.

JOHN CHARLES EAGLESON

May 5, 1919 — July 9, 2008

John Charles Eagleson died on Wednesday, July 9, at home in Corvallis. He was 89.

A life-long Oregonian, John was born May 5, 1919, in North Howell. He was raised on a farm in the Eddyville area, leaving there to attend Oregon State College where he majored in forestry. He was a member of the class of ’43, but left school in late 1941 to join the U.S. Army when he thought war was imminent. He attended officer candidate school and was commissioned in the cavalry on August 22, 1942. He joined the Fourth Armored Division, which was the vanguard for the Third Army, and

served as reconnaissance officer for the combat engineering company. Prepared to land on D-Day, the division went ashore on July 12, 1944, at Utah Beach and led the advance across Europe. John fought in the Lorraine Campaign and the Battle of the Ardennes, serving with such notable individuals as Creighton Abrams and Bruce Clarke, both of whom achieved the rank of four-star general.

After separation from the U.S. Army in 1946, John began his lifelong career as a logger. He was considered by many as the best “cat skinner” in the area. Many of the roads in western Benton County and eastern Lincoln County were built by him in the course of logging operations.

John is survived by his wife of 60 years, Erla Mae, of Corvallis; son, Charles Wesley of Corvallis; daughter, Laurie Elaine Eagleson of Tucson, Arizona; brothers, Boyd Eagleson and Ralph Eagleson of Eddyville; sister, Harriet Nordyke of Corvallis; grandson, Robert William Eagleson of Portland; granddaughters Christine Ann Eagleson of Anchorage, Alaska, and Natali Glotter of Corvallis; great-granddaughter, Daniela Glotter of Corvallis; and great-grandson, Jayden Glotter of Corvallis.

Memorials can be made to either the Heartland Humane Society or Evergreen Hospice in care of McHenry Funeral Home, 206 N.W. Fifth St., Corvallis, OR 97330.

VAUGHN HAROLD HOFELDT

September 3, 1918 — February 11, 2008

Vaughn Harold Hofeldt, age 89, died peacefully



February 11, 2008, in his daughter and son-in-law’s home in Sarasota, Florida, following an extended illness. He was born September 3, 1918 in Portland, Oregon, the only child of Claus and Stella

Burson Hofeldt. He grew up in the Mt. Tabor area of Portland, spending much of his free time at Ak-Ta-Ti, the Mt. Hood log cabin he helped his father build.

An early and avid skier, he built his own skis and trekked up Mt. Hood to downhill even

as the Timberline Lodge was still being built. In 1939 he competed in the first collegiate ski competition at Timberline. He was still enjoying skiing well into his 80s. His love of the outdoors naturally led to a degree in forestry from Oregon State University. During the summer break he worked for the Siskiyou National Forest, U.S. Forest Service (USFS) as a fire lookout. He fondly recalled traveling to his summer job via the Rogue River mail boat to Agness, Oregon. Vaughn was a member of the Kappa Sigma Fraternity and graduated in 1941.

He enlisted with the Navy during World War II and initially served in the South Pacific, in the Construction Battalion. He was later sent to Arizona for officer training, specializing in communications. On his second tour to the South Pacific, his unit was part of the Bougainville campaign in the Solomon Islands, assigned to establish communication coordination between the allied fleets in the Pacific theatre.

On leave during the service, he married his college sweetheart, Kathryn (Kay) Avery, living in San Francisco. He and Kay shared an enthusiastic and optimistic outlook for the future, and they shared the journey beautifully for nearly 65 years.

Following WWII, Vaughn began a long career with the USFS. By the end of his career he had worked on six National Forests, seven Ranger Districts, two Supervisor's Offices, three Regional Offices and the Washington Office. He worked as a District Ranger, Forest Supervisor, and in a variety of resource areas including lands, timber, fire, and many years devoted to forest recreation. Some of his career highlights included assisting ski industry partners in the development of Lake Tahoe area ski resorts, and the establishment of the Cohutta Wilderness in north Georgia. After retirement he created a consulting forest management and brokerage company, along with a family Christmas tree farm. Besides learning how to pack a box, his family enjoyed all the side benefits of being a Forest Service family, living and recreating in National Forests, coast-to-coast. He and Kay made many lifelong friends in the USFS, and in the towns the service brought them to.

Surviving family members include his wife Kay, children Kristin (Larry) Baker, Kathryn Hofeldt (Ed Provost), and Kimberly Hofeldt (Bill Murphy); his grandchildren Vaughn (Cindi) Bass, Jake (Sarah) Bass, and Donn Cooper; two bouncing great-grandchildren, his sister and brother-in-law Bob and Harriet Gustafson, nieces Joyce (Ranse) Reynolds, Janet (Steve) Vaughn and great-niece Rachelle Arroyave.

The family welcomes donations made in his memory, either to Oregon State University, College of Forestry, 503-553-3409 (<http://osufoundation.org/howtogive/>) or to the Turtle Bay Exploration Park, Plant-A-Tree Program, 1-800-887-8532 (http://www.turtlebay.org/mem_donate.php).

LAWRENCE CAMPBELL MERRIAM JR.

August 31, 1923 — October 5, 2008

Lawrence ("Larry") Campbell Merriam Jr. was



born Aug. 31, 1923, in Portland. The family moved to Berkeley, California, in 1926, when Lawrence Sr. joined the National Park Service. When his father became superintendent of Yosemite National Park, Lawrence went to Mariposa High School,

a 60-mile bus ride from the park. He graduated in 1941. Lawrence studied at U. C. Berkeley and at the University of Nebraska, and was a member of Phi Delta Theta fraternity. He joined the Navy during World War II and earned a commission as ensign from Columbia University in New York. He served in the Pacific Theater and was honorably discharged in 1946 as Lieutenant j.g.

He married Katherine Wagner of Los Angeles in September 1947, and returned to Berkeley to complete his Bachelors of Science in forestry. He then had 10 years of practical forestry experience with Long Bell Lumber Company, California, the Bureau of Land Management in Medford, and Willamette National Lumber Company in Sweet Home. He appraised timber for the construction of Interstate 5, wrote park history, and did park planning and development with the Oregon State Parks system and Highway Department. During this time, he earned a master's degree in forestry in 1958 and a doctorate in forest management in 1963, both from Oregon State University.

He taught forestry at the University of Montana, Missoula, for seven years, and then became professor of forest recreation at the University of Minnesota from 1966 to 1986. He wrote a number of magazine and professional journal articles, co-authored a forestry textbook and wrote one book entitled, *Oregon's Highway Park System, 1921-1989*, an Administrative History. In 1968, he conducted a national park

feasibility study in Paraguay for the United Nations. He and his wife traveled extensively, including to many Elderhostels, and had a sabbatical year journey around the world.

Lawrence and Katherine's oldest son, Ken, was born with Down syndrome in 1950, and they founded the Oregon Association for Retarded Citizens (ARC of Oregon) in 1954. Lawrence was also on the board of the National Parks and Conservation Association in Washington, D.C., and involved with many conservation organizations throughout his lifetime.

Larry and Kathie retired to Corvallis in 1986 and have been very active in community affairs. He was an early promoter of Greenbelt Land Trust, worked at the Benton County Historical Museum (and Horner Museum), helped with book sales for the library, was on the board for Marys River Watershed Council and Benton County Parks Department, and was an active member of the First Congregational United Church of Christ.

For many years after his formal retirement, he had a Courtesy Faculty appointment in the Forest Resources Department at OSU, where he delivered guest lectures in forest recreation classes and also mentored students. He and his wife also endowed a scholarship, which has helped many students finance their education at the College of Forestry. "Larry had an encyclopedic knowledge of Oregon state parks, several federal Wilderness areas, and forestry in general," notes Jack Walstad, former Department Head in Forest Resources. "He will be greatly missed."

His children are Kenneth, Howard and Laura and her husband, Peter Armstrong, of the Twin Cities; Susan and her husband, David Graves, of Lafayette, California; and Bill and his wife, Cheryl, of West Linn. His grandchildren are Carolyn Merriam Jenkins, Pierce and Matisse Merriam, Meredith and Grant Armstrong, all of the Twin Cities; Steven, Robert and Margaret Graves of Lafayette, and Kyle and Leah Merriam of West Linn. He has one brother, John Edwin Merriam, and his wife, CC Ramsey, of Washington, D.C., and several nieces and nephews.

Contributions in his memory can be made to Greenbelt Land Trust, Box 1721, Corvallis, OR 97339, Benton County Historical Museum, 1101 Main St., Philomath, OR 97370-0035, First Congregational Church, 4515 S.W. West Hills Road, Corvallis, OR 97333, or Oregon Association for Retarded Citizens, 1745 State St., Salem, OR 97301.

OSU Homecoming & Fernhopper Tailgater

free **BBQ**

Celebrate Fernhopper Day
Saturday, November 1
Hatfield Courtyard
Richardson Hall
4:00-6:30 pm



Illustration by Sandie Arbogast

For more information, see our website, <http://fernhopper.forestry/oregonstate.edu>



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