MESSAGE FROM THE DEAN

In mid-September, as the "College of Forest Resources bus tour" made its way back to Seattle on the ferry across Puget Sound, I thought about the opportunities the tour provided, not only to acquaint our new faculty with College field sites, but also to demonstrate and reaffirm our engagement, commitment to excellence, and transformative power in communities throughout Washington.

The tour introduced our new faculty Drs. Jonathan Bakker, Renata Bura, Sharon Doty, Greg Ettl, Dean Glawe, Soo-Hyung Kim, Joshua Lawler, Monika Maksal, and Christian Tergerman — all of whom you’ve met in the CFR News — to the scope of College contributions to natural resource challenges affecting the lives and livelihoods of our region’s residents. The tour began at the UW Botanic Gardens (UWBG), and throughout the following three days visited the Center for Sustainable Forestry (CSF) at Pack Forest, near Eatonville; the Wind River Canopy Crane Research Facility, near Carson; the NORPAC newsprint mill in Longview; and the Olympic Natural Resources Center (ONIRC), on the Olympic Peninsula near Forks.

Along the way we stopped in Mt. St. Helens National Volcanic Monument, drove along Willapa Bay, visited a small forest landowner’s Sitka spruce plantation, and viewed the Elwha Dam. At all of these sites, College researchers are adding to the store of knowledge and discovery about our natural resources, social and cultural environments, and economic opportunities.

The examples are many:

• At UWBG, research and outreach in environmental horticulture, restoration ecology, and invasive and rare plants create a network of teaching and learning that includes collaboration across the three UW campuses, as well as with the community volunteers who help maintain UWBG’s demonstration gardens and Washington Park Arboretum collections, and the public who take classes in horticulture and conservation.

• As part of Pack Forest conducts research and demonstration of sustainable forestry and works with partners in regional efforts like sustainable management of the Nisqually River watershed.

• The Wind River site is an internationally recognized contributor to forest canopy research. It also hosts scientific, and educational visits; just last year, a live “electronic field trip” potentially reached 15 million grade school students.

• Our Stand Management and Precision Forestry Cooperatives engage in research and technology transfer to ensure efficient use of our forest resource; mills like NORPAC will continue to benefit from planted forests increasingly managed to provide specific wood properties. Longview’s wood export facilities are supported by research done in our Center for International Trade in Forest Products.

• ONIRC collaborates in research on the Olympic Experimental State Forest and in outreach and community projects with the City of Forks and surrounding school districts. Its researchers are also helping to mitigate the harmful effects of invasive species and algal blooms on coastal and Willapa Bay fisheries and shellfish resources.

• Researchers working with the Rural Technology Initiative help family forest owners, Native Americans, and public agencies transfer the latest science and technology to users in the field.

As we approach our Centennial Year, we envision our next century of creating futures. The bus tour “roadmap” demonstrates how we are making a difference in this century, transforming our world through continued engagement and excellence.

B. Bruce Bare

"The College of Forest Resources: creating futures since 1907.

Denman Chair Awarded to Rick Gustafson

The College’s newest endowed chair, the Denman Chair in Bioresource Science and Engineering, is a 2006 gift from long-time supporters Mary Ellen and W. Richard Denman. Funded at $1 million, the endowment also received a $500,000 match from the UW’s Founders Matching Initiative. The Denman Chair provides the foundation for the College to develop research and education programs related to sustainable bio-based products and sources of energy that better serve society. For the Denmans, contributing to the leadership that the UW and the College provide in solving resource challenges for future generations is a powerful motivation for support.

The chair was recently awarded to Professor Rick Gustafson, Professor of Paper Science and Engineering. Says Gustafson, “We read daily about the need to develop new processes and systems to meet the demand for sustainable energy and products. Bio-based energy and products can meet much of this demand, but research is needed to make these visions a reality. We also need to train the next generation of scientists and engineers who will develop and operate these processes. Our College is poised to lead the development, with other collaborators (within the UW and with external partners), of a new center of excellence in bioresources sciences and technology. The Denman Chair will provide the base funding to establish this center.”

This new thrust will include education, research, and technology transfer focusing on the use of biomass as a source of energy, fuel, and new chemicals that will be produced from bio-refineries. The center will also focus on integrating the production of traditional fiber and solid wood products with these new processes. For both Gustafson and the Denmans, the benefit to our society will be the capability to reduce oil dependency and to sequester greenhouse gases over the entire life cycle of manufactured products.

The Denman Chair joins other gift funds and endowments established by the Denmans in support of the College, including the Denman Professorship in Pulp and Paper Science, the Denman Professorship in Sustainable Resource Sciences, and the Denman Endowment for Student Excellence in Forest Resources.

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Raven Research on the Olympic Peninsula

William Webb, PhD student in wildlife science and urban ecology, has been researching ravens on Washington’s Olympic Peninsula since 2001. Working with advisor Professor John Marzluff, his research examines raven predatory behavior, population dynamics, movement behavior, relative abundance, and systematics.

The Common Raven (Corvus corax) is the world’s largest songbird, and is distributed throughout the Northern Hemisphere. In Western Washington, ravens weigh about 2.5 lbs. with a wingspan of around 2.5 feet. Throughout North America, this uniformly black bird is found in a wide variety of landscapes ranging from the frigid Arctic to the scorching deserts of the Southwest. Ravens adapt to a wide range of ecological conditions, and they are often the most abundant species recorded in breeding bird surveys conducted north of the Arctic Circle and in the desert Southwest. Ravens are omnivorous, consuming a variety of foods, and using many different methods to obtain food. They often scavenge at animal carcasses, but they also hunt prey, as well as feeding on fruit and grains. Ravens are believed to be one of the most intelligent vertebrate species, and they use their intelligence to exploit changing resources including food, water, and nesting substrates. They sometimes follow the movements of other animals such as wolves in the hope of obtaining food. However, the species that ravens have benefitted from the most is humans.

Says Webb, “Raven numbers on the Peninsula have increased steadily during the past 35 years while other forest nesting birds have declined during the same period. Unlike many species, ravens benefit greatly from environmental changes caused by human activities such as clearing land, building roads, and access to refuse. This increased raven abundance represents a conservation concern, as predation by ravens puts additional stress on populations of species already negatively impacted by human activities. In many areas of Western North America, predation by ravens is thought to negatively impact a number of species, including the Desert Tortoise, Least Tern, Sandhill Crane, Sage Grouse, and Marbled Murrelet.”

“Because ravens are wide-ranging, I trap (sometimes using Cheetos as bait!) and radio track them to gain a greater understanding of their movements. Many ravens are sedentary while others move great distances — some radio-tagged ravens have been found as far away as 100 kilometers from the capture location. I combine estimates of survival from radio tracking with data from following nestling ravens to gain a greater understanding of their movements. Many species, including the Desert Tortoise, Least Tern, Sandhill Crane, Sage Grouse, and Marbled Murrelet."

For more raven information, see Webb’s web page at http://students.washington.edu/webb/student_webpage.htm.

Planning for Stewardship an Important Part of Successful Ecological Restoration

Established in 1999, UW-REN is a three-campus program with strong College of Forest Resources involvement. “Among its offerings is a yearlong series of courses that gives the UW a chance to connect with surrounding communities and students a chance for real-world experience working with local parks and agencies, utilities, non-profits, and private firms,” says Forest Resources Professor Kern Ewing, a co-author of the Science article and a researcher with the College’s University of Washington Botanic Gardens (UWBG). Working in teams of four to six, student projects last year ranged from finding ways to make a rambling corner lot in a Seattle neighborhood more inviting for birds and neighbors to improving the West Duwamish Greenbelt’s upland urban forest. Teams are responsible for analysing what’s at the site, developing a client proposal, creating a detailed work plan, and putting in the sweat equity and recruiting volunteers to make it happen.

The Duwamish Greenbelt project is a two-acre site, part of the largest remaining contiguous forest within the Seattle city limits. “The site suffered from a lack of resources and restoration, with no large-scale forest management over the years,” says team member Samantha Sprunger, master’s student in forest soils. “Restoring the site, including the removal of invasive plant species, will provide enhanced wildlife habitat. Planting native trees and understory will help hold soil in place, preventing erosion, by preserving the quality of natural drainage systems and enhancing land stability. Community involvement and volunteer work and the development of a maintenance and monitoring manual will help insures the site’s continued ecological health.”

“When this capstone project engages students in interactive hands-on learning, revealing the complexity of real-world solutions and creating bonds between the university and the public,” the co-authors write in Science. Other co-authors are Forest Resources Professor Tim Hinckley; Associate Professors John Banks (UW Tacoma) and Martha Groom (UW Bothell); Research Associate Professor David Secord, Program on the Environment Director; and Forest Resources alumna Danielle Shibist (’08), UW-REN teaching assistant during 2008-2006.
College Welcomes Four New Faculty

The College continued to welcome new faculty members throughout the summer and fall. In addition to the new faculty welcomed in the Spring 2006 issue of this newsletter (Wanita Davis, Greg Ett, Sue-Hyang Kim, Mosika Moukal, and Christian Torgersen), an additional four faculty have joined the College.

Assistant Professors Jonathan Bakker, natural resource management and restoration, and Sharon Detry, bioinvasions science, will join us in autumn. Bakker was most recently Senior Research Specialist with Northern Arizona University’s Ecological Restoration Institute. Detry has a dual Research Assistant Professor appointment with the College since 2003. Joshua Lawler, currently a David H. Smith Postdoctoral Fellow in the Zoology Department at Oregon State University, will join the College in Winter Quarter 2007 in the quantitative landscape science position. Dean Glawe, Professor of Plant Pathology, is the College’s newest shared Washington State University faculty member, the Memorandum of Understanding between the UW and WSU appointing Glawe Professor (WOT) at the College since 2003. Joshua Lawler, currently a David H. Smith Postdoctoral Fellow in the Zoology Department at Oregon State University, will join the College in Winter Quarter 2007 in the quantitative landscape science position.

New Endowed Fellowship Honors W.G. Reed

The College is pleased to announce the establishment of the W.G. Reed Endowed Fellowship in Sustainable Resources Science. The fellowship honors William G. (Bill) Reed, who passed away in 1989 who would become Simpson Investment Company and is a generous gift from the Simpson family. In 1932, Reed became the company’s president, leading it for nearly half a century and instilling his commitment to integrity, safety, stewardship, and sustainable management as a legacy for future generations. Preference will be given to students interested in natural resource sustainability, with emphasis on sustainable forestry and forest enterprises, watershed management, ecosystem services, and natural resource economics and policy. Holders of the endowed fellowship will advance the science of global sustainability through a better understanding of the ecological, economic, and social issues surrounding stewardship and restoration of natural and managed environments.

Highlights

In faculty news, Darlene Zabowski was promoted to Professor, effective September 16, 2006, and John Perez-Garcia was promoted to Professor (WOT), effective July 1, 2006. Rick Gustafson was appointed the College’s first Deanman Chair in Bioresources Science and Engineering (see article on page 1) and David Ford was appointed the second Richard A. Woods Professor in Restoration. Both appointments are effective September 16, 2006.

University of Washington Botanic Gardens (UWBG)

The College welcomed Tom Wolford as Executive Director of the Washington Palp and Paper Foundation, taking the place of John Hatley, who retired in June 2006.

College News

Alumni Focus

Alumni Annual Meeting and Banquet Scheduled for November 17

The College’s Alumni Association (CFAA) will hold its annual meeting and banquet on November 3, 2006. For more than 90 years, CFA alumni, faculty, staff, and students have gathered every year to reconnect, honor achievement, learn from each other, and share a meal. Events include the 12 p.m. meeting and a 2 p.m. College Research Showcase featuring current projects of the College’s Olympic Natural Resources Center. Both the meeting and the show will be in the Lockwood Forest Club Room, Anderson 207.

A 6 p.m. social will be followed by the 7 p.m. banquet, a sit-down dinner of Northwest styled plank salmon and chicken with wild mushrooms. The social and the banquet will be held at the College’s University of Washington Botanic Gardens, Center for Urban Horticulture. Featured banquet speaker will be Robert Van Pelt (’95), ‘95, founder of Forest Giants of Washington State. Bob Van Pelt currently serves as Affiliate Professor with the College, where he is engaged in canopy research on Douglas-fir and Coast Redwood forests. Honored Alumni, Honorary Alumni, and Distinguished Service and Excellence in Teaching award winners will be announced and honored at the banquet.

Don’t miss these great events, which will kick off the year-long celebration of the College’s Centennial. It will also be the 50th Reunion for the class of ’56. Make a reservation (required) for the banquet online at UWAlumni.com or by calling 1-800-AUW-ALUM.

Alumni News

Bob Morrow (’57, ’72) is a retired fish and wildlife biologist for the Army Corps of Engineers, living in Olympia, Washington. He writes to establish contact with his mentor Professor Emeritus Richard Tabor, who says, “sent me off on a wonderful career in 1972.”

Eric Dietzen (’79, ’83) in the World Wildlife Fund’s (WWF) Chief Scientist and Vice President for Science. His areas of expertise are tropical marine, large mammal biology, biogeography, bats, rhinos, seed dispersal, and community ecology. His most recent book, Tigers in the Other Place, was published by Island Press in 2005.

Tamarra Shearer (’94) is trail crew foreman for the Columbia River Gorge National Area, after stints with Mt. Hood National Forest as a silviculturist and road manager. She writes, “The road manager job helped prepare me for working on trails… I am again learning new skills in the woods. I’m pretty far removed from the science of silviculture, but I’m still close to the forest.”

Steven Bubaly (’91) was recently appointed Senior Vice President and Chief Financial Officer of Longview Fibre Company.

Vicki Christiansen (‘83) is President of Environmental Biology at the University of Guelph in Ontario, Canada. His current research includes learning toward a better understanding of the basic biology of some fungal pathogens causing diseases of grasses and trees.

Tad McCurdy (’70, President and CEO of Brooklyn Botanic Gardens, was recently named one of the top 100 museum professionals of the past century by the American Association of Museums.

Alcoma Robbins (’94) co-authored an article on sustainable forestry in the June 2006 issue of National Geographic.

Marianne Elliott (’99, ’05) is working for the Canadian Forestry Service.

Francis Harrisson (‘41)

Doree Ross (’54)

Albert Hebein, Jr. (’55)

Ronald Welch (’56)

Elizabeth Leigh Klein (’85)

In Memoriam

Eddie Williggs, Sr.’41)

Edwin Plogb, Sr. ’57)

Donn Nissen (’54)

Albert Hebein, Jr. (’55)

Ronald Welch (’56)

Elizabeth Leigh Klein (’85)

Robert Van Pelt (’95, ’72) in the donor canopy.
The “Finnish Connection” — Lignin Chemistry to Biofuels

In 1981, then College Dean Gordon Marchwok hired a brilliant young wood chemist, Kyosti Sarkanen, from Finland. “Sarkanen was initially unsure about his role in a forestry college,” says Paper Science and Engineering Professor Rick Gustafson, “but went on to become the world’s foremost authority on lignin chemistry. He established a productive relationship between the UW and forest products researchers and academics in Finland that continues today.” Not long after Gustafson arrived at the College in 1986, Sarkanen introduced him to Jussi Ollilainen, then Professor of Pulping Technology at Helsinki University of Technology (HUT) and Pans Tikka, current holder of that title. Since then, Gustafson has traveled to Finland almost every year to conduct research and do collaborative teaching.

Says Gustafson, “Much of our work together has involved joint research to improve the pulping process. HUT has an extensive pulping laboratory with sophisticated and well-instrumented reactors. They’ve used these reactors to conduct in-depth pulping kinetic studies. We took the results of these experiments and developed a theoretically-based Kraft pulping process simulator now commercially available from Pacific Simulation. The simulator has been used in industry and academia to optimize operation and to diagnose problems in commercial digesters throughout the world. Both the College and HUT use the simulator in undergraduate courses, exchanging course case studies based on using the simulator in real-world scenarios.”

Recently Gustafson collaborated with HUT on applications of an instrument developed by his lab to measure single fibers for wood pulp uniformity and quality. The collaboration included an exchange of graduate students between HUT and the College — students from HUT traveled here to learn about the instrument and last month Ming Qiao, PhD student, traveled to Finland. Qiao says, “I was honored to have an opportunity to work at HUT, installing the Single Fiber Kappa Analyzer and training researchers to use it.”

Both Gustafson and Qiao were also able to fit in a few tourist experiences. “The most memorable for me was a canoe trip down a wild river in Lapland far above the Arctic Circle,” says Gustafson. “The birch forests were beautiful in their autumn colors, and we sampled cloud berries, experienced a ‘smoke sauna’ followed by cold dip in the river, and were chased by a wild-eyed dog (never has a canoe been loaded so fast!).” Adds Qiao, “For me, the most impressive thing was the delicious tuna!”

This October, Gustafson will return to Finland to continue his collaborative work with HUT. He also plans to continue investigating the potential for work on biofuels in Scandinavia, both in Sweden (where he has begun developing connections with biofuel researchers) and in Finland.

A LEGACY IN THE MAKING

A bequest to the University of Washington is a thoughtful way to achieve your charitable goals without making an outright gift today. Your bequest to the UW may reduce your estate taxes as well as provide you with other benefits, including:

• Your assets remain in your control during your lifetime,
• You may direct your bequest to a particular purpose, program, school or college;
• You can modify your bequest at any time if your circumstances change.

CAMPAIGN UW: CREATING FUTURES

Upcoming Events Calendar

NOVEMBER 9
College of Forest Resources Alumni Association Annual Meeting and Banquet, UW campus

NOVEMBER 11
Denman Forestry Issues Series: “Sustainable Urban Ecologies: Human dimensions and management,” UW campus

NOVEMBER 22-23
Reception, Resort at Semiamoo, WA

FEBRUARY 8 & 22, 2007
Centennial CFR-UWAA Lecture Series, “Sustaining our NW World,” UW campus

FEBRUARY 15, 2007
Centennial CFR-UWAA Lecture Series, “Sustaining our NW World,” UW campus

CFR News

Please direct all corrections and inquiries to CFR News, University of Washington, College of Forest Resources, Box 352150, Seattle, WA 98195-2100.

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Share your news: CFR alumni activities and successes are of interest and inspiration to faculty, students, staff, alumni, and friends of CFR. Update your contact information at http://www.washington.edu/alumni/addresschange.html. This newsletter can also be found on line at: www.cfr.washington.edu.

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