

UNIVERSITY of WASHINGTON

College of Forest Resources News

FALL 2008

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MESSAGE FROM THE DEAN

The UW Board of Regents has approved the creation of a College of the Environment (CoE) and a new interdisciplinary institute to leverage the UW's ability to address challenges in "understanding our environment, developing solutions, and applying those solutions to sustain, steward, and improve the environment." The organizational structure and faculty composition of the CoE is not specified. A number of existing academic units, including our College, have been proposed as either a core or a collaborating independent unit. Sometime this fall, the UW Provost will request faculties of campus units to decide how they wish to participate with CoE. Until these decisions occur, existing degree programs and organizational structures remain unchanged.

Our College has long been a leader in forestry and natural resource management and science. The urgent need to solve the environmental challenges we face today makes our programs in high demand. Our Environmental Science and Resource Management undergraduate major, offering options in sustainable forest management, landscape ecology and conservation, wildlife conservation, and restoration ecology and environmental horticulture grew by over 30% in 2008. Our graduates are leaders in natural resources and public and private land management throughout the world. Our faculty research has regional and global importance. Our outreach and technical transfer provide knowledge and training in forest products, sustainable forestry, ecosystem science, wildlife conservation, bioresource science, public gardens, urban ecosystems, and environmental horticulture. Our partnerships include

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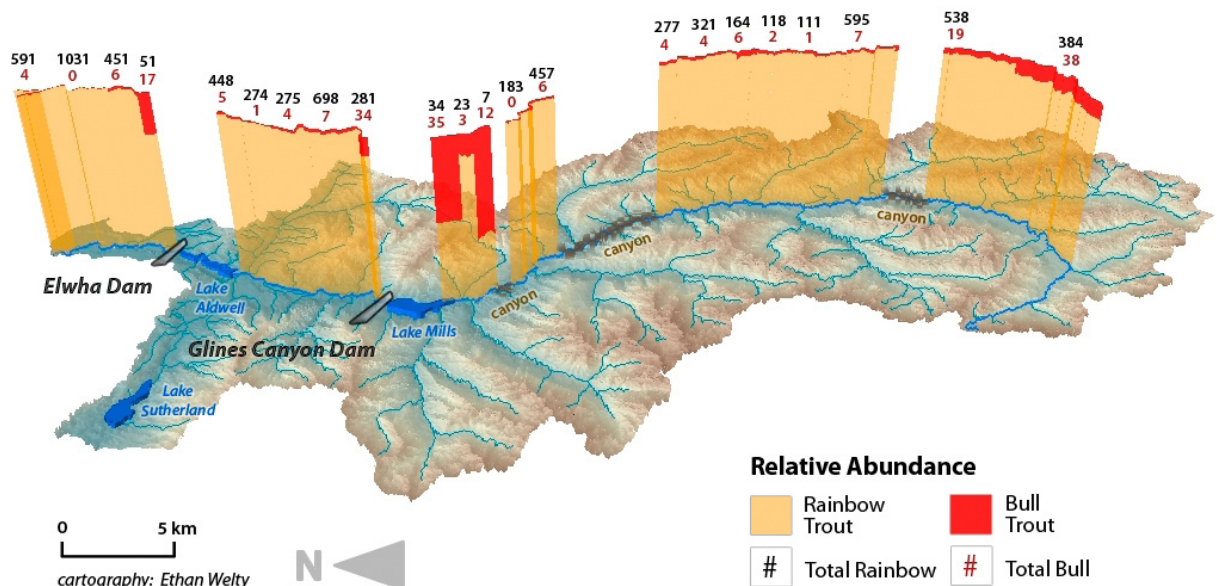
Elwha River Restoration

The Elwha River on Washington's Olympic Peninsula once supported ten salmon runs representing all five species of Pacific Salmon, some of the richest runs outside of Alaska. Two dams constructed on the Elwha over 90 years ago dramatically changed the river ecology. Built without fish passage, the lower Elwha dam has limited salmon to the lower five miles of the river.

In 1992, the Elwha River Ecosystem and Fisheries Restoration Act authorized removal of the dams in order to restore the once-plentiful salmon runs. Dam removal is currently slated to begin in 2012, offering researchers an unprecedented opportunity to study ecosystem recovery. Since over 80 percent of the watershed lies within Olympic National Park, little has changed there since construction of the lower dam — except for the absence of anadromous fish.

The lack of salmon and steelhead for almost a century from all but the lower five miles of the river has likely had profound ecological effects. The dams formed two reservoirs that have acted as sediment traps, starving the lower river, the delta at the river mouth, and the nearshore and beach areas of material that would have naturally accumulated and

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Prairie Restoration and the Island Marble Butterfly

In 1998, a small population of the Island Marble butterfly (*Euchloe ausonides insulanus*), thought to be extinct for nearly 90 years, was found in Washington state in San Juan Island's National Historical Park on remnant prairies in the park's American Camp. The Island Marble is a beautiful mostly white and yellow butterfly with a greenish marbled texture under the hind wing. The species had historically inhabited coastal grasslands and Garry Oak woodlands in the San Juan Islands, Vancouver Island, and the Gulf Islands; the earliest record is from Vancouver Island in the 1860s. Restoration ecology PhD candidate Amy Lambert is currently working with Professor Kern Ewing on a collaborative effort supported by the PNW Cooperative Ecosystem Studies Unit to better understand the demographics and landscape requirements of the Island Marble to help park managers enhance its survival.

Lambert completed her master's degree at the College in 2006, working on restoring native plant communities in American Camp, one of the last surviving natural prairies in the Northern Straits and Puget Sound regions. Now, in her PhD project, the prairie restoration project is adding a layer of complexity to the Island Marble research. Says Lambert, "Changes in and loss of prairie habitat and structure likely caused the Island Marble's numbers to decline.



Amy Lambert conducting fieldwork in American Camp. Photo: Julie Combs.



These changes have had multiple causes, including grazing by livestock and the loss of open prairie grasslands through housing and urban development. Dependent on plants from the mustard family as a host and a food source for its larvae, the Island Marble now appears to be using introduced field mustard—an agricultural pest—as one of its primary food sources. The Island Marble has persisted, if only precariously, by switching to introduced host plants."

After a formal review in November 2006, the U.S. Fish and Wildlife Service declined to add the Island Marble to the Federal list of threatened and endangered species but authorized a Conservation Agreement with the National Park Service to ensure the conservation of the butterfly. Lambert's research will help answer the many questions that are crucial to the success of any conservation and management plan. At what stage in its life cycle—egg or caterpillar—is the Island Marble most vulnerable? If native mustard species are restored, will the Island Marble go back to using native mustards as a host plant? And perhaps clues can be found as to where other populations of the Island Marble may exist, and why and how it survived on San Juan Island.

"This is an exciting opportunity for research as well as public education," says Lambert. "There are 36 species of butterfly recorded on San Juan Island, all on just 1,752 acres, and the rediscovery of the Island Marble on National Park Service land here makes this an even more special place." Lambert also holds a degree in fine art and is interested in the intersections of public art, restoration ecology, and conservation biology. She was chosen by UW Bothell as one of five UW graduate students in the 2007-2008 Project for Interdisciplinary Fellows Program that gives doctoral students an opportunity to develop teaching skills in an interdisciplinary program that integrates the arts and sciences.

Elwha River Restoration *continued from page 1*

receded as part of a normal seasonal process. Erosion in the nearshore areas of the Strait of Juan de Fuca and an armoring of the river bed have reduced spawnable areas. The anadromous fish community structure has changed from one dominated by pink salmon to one that is dominated by hatchery produced Chinook and coho. Between the dams and above the upper dams, the loss of marine-derived nutrients may have affected aquatic communities and caused population declines in many species of birds and mammals who feasted on salmon carcasses.

The impending dam removals have accelerated research and monitoring by scientists from federal and state agencies, the Lower Elwha Klallam Tribe, and several universities. The baseline information being collected will represent the existing conditions of a river ecosystem that dramatically changed when the dams were constructed.

Assistant Professor Christian Torgersen, a USGS research landscape ecologist with the Forest and Rangeland Ecosystem Science Center's Cascadia Field Station, is collaborating with biologists from the USGS, the National Park Service, the Lower Elwha Klallam Tribe, the U.S. Fish & Wildlife Service, NOAA's Northwest Fisheries Science Center, Peninsula College, and the Wild Salmon Center on a large-scale survey of adult fish in the mainstem Elwha from its headwaters to the sea. Torgersen, one of 12 new faculty hired by the College in the last two years, has a PhD from Oregon State University and an interdisciplinary background in fisheries science and geography. His research uses geospatial applications, such as remote sensing and GIS, and statistical modeling to quantify spatial patterns of animal distribution and identify how scale of observation influences our understanding of ecosystems.

Says Torgersen, "The project's first survey took place in August 2007. With a goal of establishing a baseline of adult fish distribution and patterns of abundance for each species throughout the entire river, 21 snorkelers surveyed 42 miles of river, beginning at 2,250 feet in the upper Elwha Valley and ending where the Elwha enters the Strait of Juan de Fuca. Unlike other whole-river efforts that may occur over an entire summer, this survey was

conducted in a single week." In addition to snorkelers, the expedition required aerial reconnaissance surveys to scout remote canyons, and a string of mules to haul 1,000 pounds of fisheries sampling and camping equipment into remote locations. "We're analyzing the data collected and planning for a similar effort this year," says Torgersen. "The main difference is that we will be mapping both fish distribution and aquatic habitat in a high-resolution, spatially continuous manner. Last year we just enumerated fish in reaches that were several kilometers long. This year we'll be attempting to quantify and map every pool and riffle and their physical characteristics to relate to fish abundance."

The Cascadia Field Station, housed in the College of Forest Resources, was originally established as the Cooperative Park Studies Unit in 1970 to provide scientific support for the National Park Service and to complement the teaching and research missions of the College. "This survey on the Elwha is a great example of collaboration among natural resource practitioners and researchers to conduct coordinated research across an entire watershed," says Torgersen, who helped collect the data and provided guidance on geospatial methods and analysis. For more information see http://faculty.washington.edu/cet6/pub/USGS_FAB_fall_2007.pdf; and a special issue on Elwha River restoration in the journal *Northwest Science*, <http://www.pc.ctc.edu/coe/publications.htm>.

Snorkelers count fish in the Elwha River. Photo: Jeff Duda.



College News



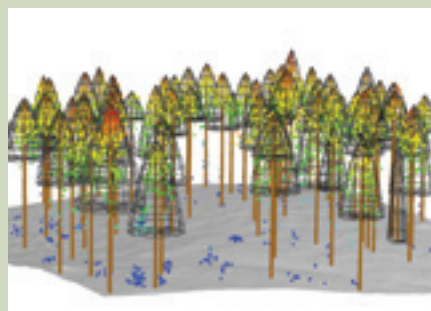
College Welcomes New Wildlife Science Faculty

The College welcomed Assistant Professor of Wildlife Conservation Aaron Wirsing to the CFR faculty in September 2008. Wirsing was previously a postdoctoral fellow at Florida International University. His wide interests in predator-prey dynamics span the terrestrial and marine realms and include substantial statistical modeling; he is currently leading a long-term assessment of the indirect effects that tiger sharks exert on a seagrass community by altering grazer habitat use in a coastal marine ecosystem in Australia. He is also exploring the implications of hare habitat preferences for lynx management and recovery in the northwestern U.S.

Denman Series on Ecosystem Restoration

Established by the College in 2000, the Denman Forestry Issues Series provides information and discussion for the UW community and the public on timely forestry and natural resource issues. A program on

May 29, 2008 at UW Botanic Gardens Center for Urban Horticulture focused on ecosystem restoration and included presentations by College faculty Jon Bakker, Kern Ewing, and Jim Fridley; UW Bothell faculty Warren Gold; landscape architect Peter Hummell; Josh Chenowith, National Park Service; and Jammie Stauffer, Earthcorps. Denman programs are recorded by UWTV in digital format and broadcast nationwide on the UWTV cable channel and the ResearchChannel. They can also be viewed via streaming video at the UWTV website. The series is funded with support from Mary Ellen and the late W. Richard Denman.



Conference on Forest Sector Modeling

Professor John Perez-Garcia is chairing the organizing committee that will bring a conference of the International Union of Forest Research Organizations (IUFRO) to the UW in November 2008. Entitled "Forest Sector Modeling: State-of-the-Art and Future Challenges in an Expanding Global Marketplace," conference co-sponsors include the College's Center for International Trade in Forest Products, the European Forest Institute, the International Institute for Applied Systems Analysis, the USDA Forest Service, and Oregon State University. Birger Solberg of the

Norwegian University of Life Sciences will give the keynote address. Discussion topics will include short-term versus long-term modeling, use of econometric results as modeling input, integrating forest sector and biological system models, treatment of uncertainty, and incorporating wood-based bioenergy models.

Highlights

New faculty appointments include Assistant Professor of Wildlife Science **Aaron Wirsing**, and Research Associates **Barbara Clucas** and **Jim Lutz**, effective September 2008; and affiliate faculty **Cara Nelson** and **Kevin Zobrist**, effective June 2008. **Gregory Ettl** has been appointed the first James Ridgeway Endowed Professor. Affiliate Associate Professor and PNW Cooperative Ecosystem Studies Unit co-leader **Darryll Johnson** retired in July. Faculty awards included the election of **Don Hanley** as a Fellow in the Society of American Foresters.

The College appointed **Barbara Wright**, Arboretum Foundation Board Member, to the College Visiting Committee.

The **Center for Sustainable Forestry at Pack Forest** hosted 125 high school students from around the state on May 1-2, 2008 for the state finals of the Future Farmers of America's Natural Resources and Forestry contests.

The College's student clubs sponsored the annual **Garb Day** celebration on May 17, 2008, at the Center for Sustainable Forestry at Pack Forest. Events included a salmon barbecue, logging sports, and a forestry quiz bowl.

The **Washington Pulp and Paper Foundation** held its Annual Meeting and Banquet on May 22, 2008 on the UW campus.

Along with WSU Extension and King County, the College co-sponsored a **Summer Youth**

Forestry Institute in July 2008. Eleven high school students set up forest survey plots in rural King County, and learned about forest ecology, forestry, and natural resource management. They also entered data and ran treatment simulations using the College's Landscape Management System.

The **Byron and Alice Lockwood Foundation** recently pledged funding over the next five years for a Byron and Alice Lockwood Endowed Professorship for a faculty member with expertise in the sustainable management of natural resources. The **W.G. Reed Fellowship in Sustainable Resource Sciences**, established in 2006, received a \$50,000 matching gift from The UW Founders on July 1, 2008, increasing the principle value by 50 percent.

The North American Plant Collection Consortium granted Member Status to the UW Botanic Gardens' Acer (maple) collection at the **Washington Park Arboretum**. The consortium's decision recognizes the collection as one of the best in North America.

The **Pacific Connections Gardens** grand opening was celebrated with a public event on September 20, 2008.



Alumni Focus

Alumni News

Ronald Kortlever ('69) is superintendent of the Bureau of Indian Affairs' Siletz Agency in Siletz, OR.

Raymond Guries ('75) is professor and chair of the University of Wisconsin, Madison's Department of Forest Ecology and Management.

Dawn Neuman ('80) was recently appointed provost and vice president for academic affairs at California State University Channel Islands.

Peter Crimp ('82) is project manager for the Alaska Energy Authority's alternative energy and energy efficiency programs.

Patricia Grantham ('82) is the forest supervisor for the Klamath National Forest in Yreka, CA.

Brian Carbaugh ('83) oversees forest operations in the state of Washington for the forest management firm, Forest Systems.

David Ek ('83) is assistant chief of resources management at Death Valley National Park.

Eric Hoberg ('84) is zoologist and curator of the USDA Agricultural Research Service's National Parasite Collection in Beltsville, MD.

Barbara Cole ('86, '83) is professor of wood chemistry at the University of Maine, Orono.

Erik Anderson ('87, '84) is chief executive officer of Louis Dreyfus Commodities North American region, in Wilton, CT, where he coordinates worldwide grain activities.

Susan Frankel ('91, '83) directs the Sudden Oak Death Research Project at USFS Pacific Southwest Research Station in Albany, CA.

Heather Erickson ('94, '84) is an ecosystem ecologist for the USDA Forest Service in Portland, OR.

Kevin Zobrist ('01, '00) is Washington State University's forest stewardship extension educator for Snohomish and Skagit Counties.

Sheri Stephanson ('04) is the Social Measures program officer for the World Wildlife Fund in Washington, DC.

Robin Leshner ('05) has worked as an ecologist for Mt. Baker-Snoqualmie National Forest's Ecology Program since 1984; her specialty is inventorying the forest's lichens, liverworts, and mosses.

In Memoriam

Morten Lauridsen, Jr. ('39)
George Corkery ('41)
Tom Anderson ('48)
Robert Jacoby ('83)
Frederick MacDonald ('08)

The College sadly noted the passing in summer 2008 of two stalwart alumni and friends, Morten Lauridsen, Jr. (BSF '39) and George Corkery (BSF '41).



Morten Lauridsen, Jr.
1910-2008



George Corkery
1918-2008

Mort Lauridsen, alumnus, friend, and UW Laureate, had a long and distinguished relationship with the College and the UW, beginning in the late 1920s when he entered the College's freshman class. He interrupted his studies to work for the USDA Forest Service in order to pay his way through school, and continued working there after graduation doing timber surveying. At the outset of World War II he was recruited to join the Office of Naval Intelligence. After the war, he married, raised a family, and built a career as a federal timber assessor with the IRS. He remained close to the College and the field of forestry throughout his life and was a member of the College's Alumni Association, the Society of American

Foresters, and the Forest Service's Old Smokies. Over the years he contributed to several College gift funds, including the Pearce Scholarship, the Millan Scholarship, the Gessel Scholarship, and later made a capstone gift to help establish the David R. M. Scott Professorship in Forest Resources. He also established planned gifts providing endowed funds for students and programs. Thanks to his foresight and generosity, one of his most enduring legacies will be the support that enables students to uninterruptedly complete their degrees and go on to become natural resources leaders.

During the Great Depression **George Corkery** and his brother Jack came to the UW for degrees in forestry, while their sister, Alberta, got a degree in economics. After serving in World War II, George and Jack started Corkery Brothers Painting Company in Seattle. George maintained his contact with the College throughout the many years that followed, while pursuing his passion for sailing, rowing, Husky athletics, and the church. In his eulogy, Jack Corkery described his brother as a quiet, unassuming, and frugal person who cared deeply for family, friends, and institutions like the College and the UW. In a tremendous act of loyalty and generosity, Corkery left a one million dollar bequest to enhance the Corkery Family Endowed Chair in Forest Resources. The Chair was established in 1991 by the Corkery brothers, their late sister

College Welcomes Dr. Joshua Lawler



Josh Lawler is one of twelve new faculty members recently recruited by the College; he was appointed Assistant Professor of Quantitative Landscape Science in March 2007 following a nationwide search. He holds MS and PhD degrees in ecology from Utah State University, has been a postdoctoral fellow at the University of Maine and Oregon State University, and served as a National Research Council Associate at the U.S. Environmental Protection Agency.

Lawler says, "My interests lie mainly in the fields of conservation biology and landscape ecology — I'm interested in how human activities affect ecological systems at large spatial scales. My recent research includes projecting climate-induced shifts in species distributions, investigating the effects of climate change on protected lands, modeling population dynamics in changing landscapes, developing tools for conservation planning, and modeling watershed recovery from acidification."

In a current project funded by The Nature Conservancy, Lawler is developing tools that can be used to help conservation planners address climate change. These tools include information about recent past and projected future climate changes; projected changes in hydrology and disturbance regimes such as fire, flooding, and extreme weather events; assessments of the vulnerability of sites and species to climate change; and clear and illustrative examples of the impacts of climate change on both ecological and human systems.

"For example," says Lawler, "Over the past century, we have seen shifts in species distributions and phenologies that correspond to observed climatic changes. In general, species have been observed moving upward in slope and poleward in latitude at rates that are consistent with observed temperature changes. Conservation planning is generally based on the current distribution of biodiversity, but as climate changes, species will clearly move in response to physiological temperature constraints, changes in habitat, food availability, new predators or competitors, and new diseases and parasites. It is unlikely that today's protected lands will provide protection for the same species and the same ecological systems in the future. Developing a network of lands that will adequately protect biodiversity into the future will require explicitly taking climate change into account."

Lawler teaches courses in landscape ecology and in geographic information systems (GIS). He will be co-teaching a three-quarter series of courses this coming year on the status and future of Pacific Northwest National Parks.

Lawler lives in Seattle with his wife Anne and his son Finn.

Dean's Message continued

formal interdisciplinary links across the UW as well as collaborations with academic institutions, public agencies, NGOs, corporations, and small forest landowners.

Entering our second century, we will continue to lead in solving environmental challenges — conserving plant and animal species biodiversity, understanding the effects of global climate change on terrestrial ecosystems, developing non-fossil cellulosic biofuels as an alternative energy source, protecting forest health (including invasive species, fire, and insect invasions), analyzing global markets for natural resource commodities, sustaining natural

resource-dependent communities, and helping preserve working forests at risk of land conversion. We will continue meeting these challenges whether we participate with CoE as a core unit or as a collaborating independent college.

If our faculty vote to participate with CoE as a core unit, we would bring to CoE a growing student body, high faculty teaching and research productivity, a legacy of collaboration with many stakeholders across the state and region, and significant monetary resources from supporters who have demonstrated their confidence in our vision and stewardship over the years. As a core

unit, we would evolve into a school, led by a director; losing the status of a college led by a dean, our influence would be diminished. Under this scenario, we expect that our graduate and undergraduate curricula and programs, our faculty and staff, and all other programs and resources would transfer into the new school and remain intact.

If our faculty vote to participate with CoE as a collaborating independent unit, we would develop joint faculty appointments, cross-listed classes and seminars, and participation in the new environmental institute, while continuing to collaborate with all of our UW and external partners. Further,

we would work with CoE to build new research opportunities and new initiatives to promote environmental literacy and a robust exchange of ideas.

However we choose to participate with CoE, our College remains committed to educating the next generation of leaders, scientists, and informed citizens who will help solve the natural resource and environmental challenges facing society. I welcome your input on this potentially historic change for the College of Forest Resources.

B. Bruce Bare

Alumni Focus continued

Alberta, and Jack Corkery's wife Vada May, as the College's first endowed chair. The Chair, currently held by David Briggs in support of the College's Precision Forestry Cooperative, will continue to inspire College faculty to make a scientific impact on the economic, social, and ecological sustainability of the world's forest resources for the benefit of future generations.

Alumni Annual Meeting and Banquet

The College's Alumni Association (CFRAA) held its annual meeting and banquet on October 11, 2008. For more than 90 years, CFR alumni, faculty, staff, and students have gathered every year to reconnect, honor achievement, learn from each other, and share a meal. Events included a meeting and a College Research Showcase featuring faculty and staff natural resource management projects. A social followed at Ivar's Salmon House on Lake Union with featured banquet speaker Mark Doumit, Executive Director of the WA Forest Protection Association. Alumnus, Honorary Alumnus, and Distinguished Service Awards

were presented; see the CFRAA webpage, <http://www.washington.edu/alumni/clubs/cfraa.html>, for award winners!

E-Newsletter Coming!

Beginning in 2008, the College and the UW Alumni Association will cooperate on the production of an e-newsletter with information about alumni and College activities. Update your email address at <http://www.washington.edu/alumni/addresschange.htm> and look for this enhancement of College and UW communications!



Upcoming Events Calendar

OCTOBER 11, 2008
College of Forest Resources Alumni Association Annual Meeting and Banquet
UW CAMPUS AND IVAR'S SALMON HOUSE

OCTOBER 29-31, 2008
Working Forest Forum,
RESORT AT SEMIAHMOO, WA

NOVEMBER 17-20, 2008
Forest Sector Modeling Conference
UW CAMPUS

MARCH 5, 2009
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 352100, 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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