

MES Core Faculty Biographies

Erin Ellis, Ph.D.

Erin Ellis is an aquatic biogeochemist whose research focuses on examining the role of rivers in the global carbon cycle. Rivers are large sources of carbon to both the atmosphere and the ocean and are consequently critical to our understanding of the global carbon cycle. While working in the Amazon Basin, her research demonstrated that bacteria living in the river produce high levels of carbon dioxide through respiration, and this carbon dioxide is subsequently lost to the atmosphere. Her current research in the Mekong Basin (i.e. Cambodia) focuses on characterizing the type of organic carbon that is exported by large rivers to the ocean. Specifically, she uses molecular tracers to determine where in the watershed the carbon originates from, and uses radiocarbon analyses to determine the age of this material. Such information is necessary in order to understand the preservation of terrestrial carbon in the ocean, which can affect atmospheric carbon dioxide levels over long time scales. Through her training (master's and doctoral degrees from the School of Oceanography at the University of Washington), Erin has research experience working in streams, rivers, lakes, and the ocean. Additional interests include ocean acidification, estuarine ecology, evaluating the impacts of dams on downstream processes, and microbial ecology. Her past and present research has been conducted through collaborations with colleagues in Brazil, Cambodia, and the Pacific Northwest.

Kevin Francis, Ph.D.

Kevin Francis is a historian and philosopher of science, with particular interest in the development of the environmental sciences. Kevin studied biology and philosophy at Reed College. After graduating, he spent several years working as a wildlife biologist for Mt. Hood National Forest. His graduate studies at the University of Minnesota focused on history of science and medicine. His historical research concerns scientific efforts to understand the mass extinction of North American megafauna (e.g. mammoth, mastodon, giant ground sloth) around 12,000 years ago, especially the way that various disciplines approach this problem.

Martha L. Henderson, Ph.D., MES Director

Martha is a geographer interested in social aspects of environmental conditions and transformation of Earth by humans over time. Her primary research and teaching interests are in ethnic identities as revealed in cultural landscapes. Her teaching areas and research interests include Greek landscapes of wildland fire, Native American reservation landscapes, and Western American public lands and landscapes. She has been on the faculty at Evergreen since 1995. Her work has been published in geography and political ecology journals, she has edited volumes including a co-edited book *Geographical Identities* with Kate Berry, and she has contributed to reports and newsletters. Martha is a 2004 Fulbright Research Scholar, member of the 1997 National Endowment for the Humanities Seminar, and member of the International Seminar and Research Program, Department of Geography, University of California Santa Barbara, 2004-2007.

Carri LeRoy, Ph.D.

Carri is a stream ecologist who is fascinated by interactions between forests and streams, and has studied riparian systems in Washington, Arizona, and Utah for the past 10 years. She is also Co-Director of the Sustainability in Prisons Project at Evergreen. Dr. LeRoy has published over 25 scientific research articles with students and collaborators in the fields of stream ecology, ecological genetics, riparian forest ecology and prairie plant community dynamics. As an MES faculty, she gets to teach about the ecology of the Pacific Northwest as well as the applications and theory of statistics and quantitative methods. Her interests in non-formal education are based in her experience with environmental and place-based education, her work with incarcerated students and her desire to facilitate environmental stewardship in broad audiences. Other topics she is interested in include: invertebrate community ecology, trophic dynamics in lake ecosystems, long-term monitoring of ecosystem function, and issues of aesthetics in science.

Dina Roberts, Ph.D.

Dina is a conservation biologist with broad field experience as an ornithologist and wildlife biologist, as well as experience in species management and forest policy development. Her background in field research spans more than two decades and includes studies in temperate and tropical forests to understand the impacts of forest fragmentation and land use change on biodiversity. Dina completed her Master's research from University of Georgia in collaboration with Smithsonian Migratory Bird Center in Panama looking at the importance of shade coffee plantations for tropical ants and birds. Dina received an IGERT Fellowship from the NSF to complete interdisciplinary doctoral research in a team of researchers looking at the importance of sustainable development and biodiversity protection in Costa Rica. She has since worked as a Postdoctoral Researchers at Washington State University, as an Endangered Species Biologist with the Washington Department of Fish and Wildlife, and as a Staff Scientist working at the science/policy interface to increase understanding of the global importance and increase protection of boreal forest of North America.

Ted Whitesell, Ph.D.

Ted Whitesell is a broadly trained cultural geographer with special interests in political ecology and conservation. As a freshman at the University of Colorado, Ted co-founded the CU Wilderness Study Group. After graduation, Ted ran the Colorado Wilderness Workshop, the only statewide preservation organization at the time. From 1975 to 1985, he was a leader of the Southeast Alaska Conservation Council, campaigning to secure designation of the first wilderness areas in the Tongass National Forest. He was recognized as the most accomplished environmental leader in the country of 25 years of age or less by the Tyler Foundation. Later, he earned a Ph.D. in geography from the University of California, Berkeley, investigating grassroots proposals for conservation and development in the Amazon rainforest of Brazil. Ted came to The Evergreen State College in 1998 and is affiliated with two planning units – Environmental Studies and Sustainability & Justice. His students published a major book in April 2004, called *Defending Wild Washington* (The Mountaineers Books). His most recent research was a collaborative investigation of tribal perspectives on marine protected areas in western Washington.

MES Adjunct Faculty Biographies

Richard Bigley, Ph.D.

Richard Bigley is a forest ecologist who teaches sustainable forestry and on occasion a forest ecology class. His current work focuses on the restoration of riparian forests to older forest conditions in western Washington, and the ecology and management of headwater streams and wetlands. He works for the Washington State Department of Natural Resources (DNR). Over the last 21 years with DNR, he has served as the team leader for the Forest Ecology, Wildlife Science and the Habitat Conservation Plan Monitoring and Adaptive Management Teams. He also advises other organizations on the development of conservation plans. Before DNR, he worked as an ecologist for the Forest Service PNW Experiment Station and private industry. Richard earned a Ph.D. in Forest Ecology and Silviculture and a M.Sc. in Botany from the University of British Columbia. He has been an Assistant Professor at the University of Washington, College of the Environment, School of Forestry since 1994. As member of the Northern Spotted owl "5-year review" panel in 2004, Richard was a contributor to the first comprehensive evaluation of the scientific information on the Northern Spotted owl since the time of its listing as threatened under the Endangered Species Act in 1990. After his family, his passions are the science of natural resources management and conservation, and boating.

Sarah Hamman, Ph.D.

Sarah is the Restoration Ecologist for the Center for Natural Lands Management. Her work is aimed at restoring rare species habitat in PNW prairies using rigorous science and careful conservation planning. Sarah holds a B.A. in Biology from Wittenberg University and a Ph.D. in Ecology from Colorado State University. Most of her training and experience has been in ecosystem ecology, with a focus on fire effects on forest and grassland soils. She has also studied climate change impacts on Minnesota tallgrass prairies, wolf behavior and demographics in Yellowstone, fire effects on invasive species in Sequoia National Park, and restoration techniques for endangered species in central Florida rangelands. At Evergreen, she teaches Fire Science and Society and Restoration Ecology for the Graduate Program on the Environment.

Alan Hardcastle, Ph.D.

Alan has a B.A. in Psychology from Western Washington University (1981), a M.S. in Industrial/Organizational Psychology from California State University, Long Beach (1984), and a Ph.D. in Higher Education from University of California, Los Angeles (1994). His work experience includes: Policy Associate, Washington State Workforce Training and Education Coordinating Board; Policy Analyst, Workforce Education Division, Washington State Board for Community and Technical Colleges; and Senior Research Associate, Social and Economic Sciences Research Center, Washington State University. He currently serves as Senior Research Associate with the Washington State University Extension Energy Program. Alan's areas of interest include renewable energy and energy efficiency, energy technology and policy, climate change and environmental sustainability, energy workforce and labor markets, education and training, economics, organizational analysis and development, corporate sustainability and business practices, and research design and methodology.

Jean MacGregor, M.S.

Jean is a Senior Scholar at the Washington Center for Improving the Quality of Undergraduate Education at The Evergreen State College. She directs the Curriculum for the Bioregion Initiative, a faculty and curriculum development initiative, whose mission is to prepare undergraduates to live in a world where the complex issues of environmental quality, community health and wellbeing, environmental justice, and sustainability are paramount. The Curriculum for the Bioregion initiative involves hundreds of faculty members at colleges and universities throughout Washington State. Prior to work at Evergreen, she helped develop the environmental studies program at Warren Wilson College near Asheville, North Carolina. Earlier in her career, she developed and/or evaluated environmental education programs for both youth and adults at nature centers and science museums, and in various outdoor and wilderness learning settings.

Paul Pickett, M.Eng.

Paul's career in water resources engineering spans over three decades. His career focus has been on water quality, hydrology, water supply, watershed functions, and climate change. He received a Bachelor of Science in Renewable Natural Resources from the University of California at Davis in 1984, and a Masters of Engineering in Environmental Civil Engineering from U.C. Davis in 1989. Since 1988 he's worked for the Washington Department of Ecology as an environmental engineer. From 2001 through 2012 he served as an elected Commissioner for the Thurston Public Utility District, a water utility with about 3,000 customers in five counties. He has taught at Evergreen since 2009, and also occasionally writes feature articles for local publications. He lives with his wife on acreage in rural Thurston County, along with cats, chickens, blueberries, fruit trees, noxious weeds, and mud.

Timothy Quinn, Ph.D.

Timothy Quinn has served as chief scientist of the Washington Department of Fish and Wildlife's habitat program since 1999. Quinn recently served on the Science Working Group that came up with scientific underpinnings and a technical framework for the development of the Puget Sound Partnership. He has a B.S. in Biology from Western Washington University (1979), an M.S. in Physiological Ecology of Marine Fish from Western Washington University (1987), and a Ph.D. in Wildlife Ecology from University of Washington (1993).

Gregory Stewart, Ph.D.

Greg Stewart is a fluvial geomorphologist who teaches as adjunct faculty in Evergreen's Evening and Weekend Studies program and the Graduate Program on the Environment. Greg is an applied researcher working on issues related to the interaction between humans and fluvial and ecological systems. He currently works for the Northwest Indian Fisheries Commission. Greg has various teaching interests including the use of geographic information systems theory and practice, fluvial geomorphology, geology, and statistics. Greg holds a B.S. from The Evergreen State College, an M.S. in Watershed Science from Colorado State University, and a Ph.D. in Geology from Oregon State University.