

Early cadre Scientists and staff

Pacific Northwest Research Station

2015



David Bell

Research Forester

Corvallis Forestry Lab



Geographic History: Originally from Durham, NC, Dave has lived in Colorado, Arizona, and Wyoming.

Education: BS Forestry, Colorado State University, 2002; MS Forestry, Northern Arizona University, 2005; PhD Ecology, Duke University, 2011

Previously Worked With: Bill Lauenroth (University of Wyoming) and John Bradford (USGS).

My research focuses on:

- Understanding drivers of recent changes in forest ecosystems by linking fine-scale ecological processes to shifts in vegetation pattern. This work leverages both field and remotely sensed data to develop geospatial predictions of forest change and vulnerability. Specifically, he is:
 - Exploring the relationship between regional remotely-sensing stress in forest ecosystems and stand- and tree-level forest inventory measurements.
 - Quantifying uncertainties in vegetation mapping.
 - Examining regional variation in forest and tree species productivity.

Fun Fact: Dave has attended MerleFest, an americana and bluegrass music festival in Wilkesboro, NC, six of the last eight years.

Lee Cerveney

Research Social Scientist

Seattle Lab



Geographic History: I grew up in the White Mountains of New Hampshire. I lived in New Mexico, Arizona, Ohio, Alaska, Texas, and Maryland (in that order) before coming to Seattle, Washington, where I have lived for 11 years.

Education: BA History, Dartmouth, 1987; MA Anthropology, Northern Arizona University, 1993; Ph.D. Anthropology, Syracuse University, 2004

Previously Worked With: Research director at University of Cincinnati. Program coordinator at an urban Native American center in Flagstaff, AZ.

My research focuses on:

- Human Ecology Mapping Project. With Olympic NF, we explore how participatory mapping can gather information from the public about human-forest interactions.
- Forest Service Partnerships. This study identifies the types and diversity of partners working with the Forest Service, and the benefits and challenges of partnerships.
- Residential Location Decisions at the Urban-Wildland Interface. This research explores the role of nature and public lands in shaping housing choices at the outer ring of King County (Seattle).
- Science and Decision-making in the Forest Service. Several studies explore aspects of natural resource planning.

Fun Fact: In 1988, I road my bicycle across the U.S. from Kennebunkport Maine to Kalaloch, Washington.

David D'Amore

Research Soil Scientist

Juneau Forestry Lab



Geographic History: I was born and raised in New Jersey. I went to college in Virginia then lived in West Africa for four years. I moved to Oregon and then Alaska, where I have lived and worked for 20 years.

Education: BA Foreign affairs, University of VA, 1984; MS Soil science, Oregon State, 1994; Ph.D. Forest Soils, University Alaska Fairbanks, 2011

Previously Worked With: Peace Corps

My research focuses on: critical zone science including the influence of soil geomorphology on biogeochemical and plant responses across ecosystems of the North Pacific coastal temperate rain forest.

Current projects:

- developing carbon cycling budgets that incorporate both long-term terrestrial stocks, gaseous and dissolved carbon fluxes within them, and products of rock weathering.
- investigating the mechanisms involved in the widespread decline of yellow-cedar and the implications for nutrient cycling, plant succession and watersheds impacts.

Fun Fact: I played football at the University of Virginia.

Jean Daniels

Research Forester (economics)

Portland Forestry Lab



Education: BS Forest management, 1994 and MS Forest economics, 1995, Stephen F. Austin State University; PhD, University of Washington, Forest economics, 2007

Previously Worked With: Houston Parks and Rec

My research focuses on:

- Examining how economic analyses can be applied to help guide ecological restoration efforts
- Contributing to a long history of wood market and product research:
 - Examining relationships between forest product markets and pricing, forest management, mill industry infrastructure, and community well-being
 - Helping managers understand market trends and how communities adapt to changing local and regional social and economic conditions over time

Fun Fact: I am a KARAOKE SUPERSTAR

Rebecca Flitcroft

Fish Research Ecologist

Corvallis Forestry Lab



Geographic History: Born in Singapore and lived there until I was 4. My family moved to England, then Southern Oregon. I lived in a small river cottage on the North Umpqua River after college, then moved to Corvallis and stayed.

Education: BS Economics/Env. Sci, Willamette University, 1994; MS Natural Resource Geography, 1998 and Ph.D. Fisheries Science, Oregon State, 2008

Previously Worked With: Oregon Division of State Lands, Oregon Department of Fish and Wildlife, Oregon State Parks

My research focuses on: holistic approaches to watershed analysis and management. I am interested in both statistical and physical representations of stream networks that show stream complexity and connectivity for aquatic species.

- My work explores the importance of local conditions, how climate change may affect some fish species more than others, and how different life history stages of fish are adapted to a changing stream environment.
- I enjoy working with grass-roots watershed councils and communicating science to broad audiences.

Fun Fact: I learned to drive a stick shift car when my leg was in a cast. This explains why I can now drive any car with a manual transmission.

Morris Johnson

Research Fire Ecologist

Seattle Fire Lab



Geographic History: Waterproof, Louisiana

Education: BS Urban forestry, Southern University (Baton Rouge, LA), 1996; MS Silviculture and forest protection, 2002, and Ph.D. Fire ecology, 2008, University of Washington

Previously Worked With: Rogue River National Forest, Redding and Redmond Interagency Hotshot Crews

My research focuses on: Fuel treatment effectiveness and fire effects, fire ecology, silviculture, simulation modeling and software development, bark beetles and fuel loadings. Current projects include:

- evaluating salvage logging effects on 2014 King Fire (CA)
- evaluating fuel treatment effectiveness of 2014 Bald Fire (CA)
- integrating the Fuels Characteristic Classification System and Forest Vegetation Simulator.

Past work includes:

- fuel treatment effectiveness monitoring of Washington's state largest recorded wildfire (2014 Carlton Complex)
- studies of fuel treatment effects in the dry forest of the western United States

Fun Fact: Once held the Oregon State's Junior (20-23), 90 kg, Men Bench Press Record with a 227.25 kg press.

Sarah Jovan

Research Ecologist
Portland Forestry Lab



Geographic History: Ohio

My research focuses on: Lichens, air quality, nitrogen deposition, forest health indicators.

- We looked at lichen species composition on trees in the Cleveland National Forest, San Bernardino National Forest, and Angeles National Forest and found all three forests showed symptoms of worsening of air quality.
- To date, more than 8,000 epiphytic lichen surveys have been collected across the Nation by the Forest Inventory Analysis (FIA) and their partners. This study investigated climate effects on lichen indices used to develop nitrogen critical loads for California's forests.
- Current research explores the potential for using moss as a bioindicator of air quality in urban areas.

John Kim

Biological Scientist

Corvallis Forestry Lab



Geographic History: I grew up in Southern California, then lived in Massachusetts for ten years before returning to the West Coast.

Education: BA Computer science, UC San Diego; MS Computer science, and Ph.D. Wildlife management, University of Massachusetts Amherst

Previously Worked With: Wheaton College, San Diego State University

My research focuses on: I use dynamic vegetation models to simulate climate change impacts on the forests of the Pacific Northwest. Dynamic vegetation models simulate various ecological mechanisms that drive long-term change in forests. Using these models, I create projections of future forest conditions for the national forests of the Pacific Northwest and beyond, based on multiple climate change scenarios. My model projections are used in climate change vulnerability assessments, and in studies of future global timber market dynamics.

Fun Fact: Played on a state champion high school water polo team.

Damon Lesmeister

Research Wildlife Biologist

Corvallis Forestry Lab



Geographic History: Missouri

Education: BS Biology, University Central Missouri; MS Wildlife Science, University Missouri; PhD Zoology, Southern Illinois University Carbondale

Previously Worked With: US Fish and Wildlife Service

My research focuses on: The ways land management can affect interactions between wildlife species and how animals use space based on those interspecific interactions; the influence of habitat and competitors on several wildlife species; developing and testing methods for multi-scale monitoring of wildlife populations and ecological communities; mammalian carnivores; biology and ecology of the northern spotted owl and its prey base, as well as effectiveness monitoring of those populations and habitat under the Northwest Forest Plan.

Fun fact: During a radio-telemetry study I learned a lasting lesson about the wisdom of attempting to hand-capture a striped skunk.

George McCaskill

Research Forester

La Grande Forestry Lab



Geographic History:

Education: BS Biology, University Central Missouri; MS Wildlife Science, University Missouri; PhD Zoology, University of Florida

Previously Worked With: Peace Corps, Pacific Southwest Research Station, WA DNR, Northern Research Station (FIA)

My research focuses on:

- changes in forest composition within the spruce-fir groups to determine productivity in the face of spruce budworm, gypsy moth, and beech bark disease outbreaks
- the ecology of Northern white-cedar across the northern states and its adaption to changing habitats
- working with other scientists to monitor the productivity of Northern white-cedar across the Northern Region

Fun fact: George served as interpreter/translator/editor during the Sixth Congress on Criteria and Indicators for the Montréal Protocol and helped to finalize the treaty.

Brooke Penaluna

Research Fish Biologist
Corvallis Forestry Lab



Geographic History: I am from the Midwest, but came to PNW following undergrad and have been here ever since (except for a 4-year stint to Chile)

Education: MS Western Washington U, PhD Oregon State U

Previously: I had a Fulbright to Chile

My research focuses on:

- 1) Understanding the ecology of native fishes;
- 2) Evaluating the interactions among individuals, populations, and communities of fishes, with specific interest in identifying patterns and ecological processes occurring at those levels;
- 3) Examining the effects of invasive species on invaded ecosystems, especially as related to aquatic habitat and food webs;
- 4) Characterizing how climate change and disturbance affects aquatic organisms, as well as contemporary forest harvest and restoration

Fun Fact: I am fluent in Spanish and we speak Spanish when we are at home.

Mary Rowland

Research Wildlife Biologist

La Grande Forestry and Range Lab



Geographic history: Born in Kingston, NY but grew up Camden, SC. After grad school in CO, several years in Big Piney and Buffalo, WY before settling in eastern OR.

Education: BS Zoology, Duke, 1977; MS Wildlife Ecology, Colorado State University, 1981

Previously Worked With: Bureau of Land Management, US Forest Service (Bridger-Teton National Forest), Colorado State University, Sheridan College

My research focuses on: wildlife-habitat relationships modeling; restoration ecology; wildlife habitat and population monitoring; ecoregional habitat assessments; biodiversity conservation, especially use of surrogacy concepts; threats assessment and human disturbance modeling in forests and rangelands.

Fun fact: Founding member of the Duke women's crew, a club team that went on to become a varsity sport years later. We held spaghetti dinners to raise money for oars and used a prep school's cast-off shell for 3 years as our only boat.

Peter Singleton

Research Wildlife Biologist

Wenatchee Forestry Lab

Geographic history: Peter grew up around Pittsburgh PA, then moved to the Pacific Northwest within weeks of graduating from high school.

Education: BS Environmental Sciences, The Evergreen State College, 1985; MS Resource Conservation, University of Montana, 1995; PhD Forestry, University of Washington 2013

Previously Worked With: Confederated Salish and Kootenai Tribes, Pablo MT

My research focuses on: Understanding the relationship between animal populations, landscape patterns, and disturbance processes (natural and human-caused).

My projects have addressed:

- Interactions between spotted owls and barred owls in fire-prone forests.
- Effects of forest restoration treatments on spotted owl prey (flying squirrels and woodrats).
- Developing and applying methods to assess regional-scale habitat connectivity patterns to support conservation planning and highway mitigation.
- Assessing impacts of climate change and novel disturbance regimes on animal populations.

Fun fact: Peter will play bluegrass music in exchange for free beer.

Eric White

Quantitative Social Scientist
Olympia Forestry Lab



Geographic history: From Cincinnati, by way of Illinois, Michigan, and Oregon (since 2005)

Education: BS Forestry, 1999 and MS Natural Resource Mgmt and Policy, 2001, Southern Illinois University; PhD Natural Resource Planning and Economics, 2005, Michigan State University

Previously Worked With: Oregon State University, University of Oregon

My research focuses on: Understanding the processes and outcomes in linked social ecological systems and the influences of natural resource policies, management, and climate change. Current projects are focused on social and economic outcomes from forest collaboration and accelerated restoration, outdoor recreation and the economic effects on local communities, and collaborative management of landscapes of public and private ownership.

Fun fact: Was a firefighter for 16 years in 4 states.

David Woodruff

Research Plant Physiologist

Corvallis Forestry Lab



Geographic History: Born in Seattle WA and raised in that area. Not long after finishing my undergrad in Colorado I moved to Oregon.

Education: BA Environmental Studies, University of Colorado, 1992; MS Forest Science, Oregon State University , 2000; PhD Forest Science, 2008, Oregon State University

Previously Worked With: University of Colorado Institute of Arctic and Alpine Research, Washington State Department of Natural Resources, Chetco Ranger District Siskiyou NF, Oregon State University College of Forestry, University of Washington College of Forestry

My research focuses on: how environmental factors affect growth and survival of trees and the physiological mechanisms involved in these impacts. More specifically:

- The impact of water stress on a range of plant physiological process such as photosynthesis, cell expansion, water transport and phloem transport.
- Growth and mortality of tree seedlings at very early stages of growth and how future climate regimes may influence tree seedling survival.
- Climate smart forest management strategies to mitigate the effects of drought on tree growth and vigor.

Fun fact: Due to a lack of funds for car repair, I once drove from Seattle to Colorado with just the e-brake for brakes on my 1972 VW Squareback (don't tell my kids).