

Restoration Research Contacts – USDA Forest Service Research and Development

Forest Products Laboratory

Cai, Zhiyong	Madison, WI	Materials Research Engineer	Wood-based composites; composites warping; engineered composite properties; cellulose nano material and nano composites; wood Structural design and assessment; product standard development
Illman, Barbara L.	Madison, WI	Plant Pathologist	Characterization of fungal mechanisms of wood decay at the micro- and nanoscale levels, Isolate, characterize, and identify natural pesticides
Rudie, Alan W.	Madison, WI	Research Chemist	Kraft pulping; Prehydrolysis for biomass conversion; bonding and behavior of alkali earth and transition metals in wood pulps; Trace metal accumulation and scale formation in pulping and bleaching; wood conversion to chemicals
Ross, Robert J.	Madison, WI	Research General Engineer	Fundamental information on the engineering properties and performance of woody materials; non-invasive assessment procedures for trees, logs and wood products; codes and standards development for woody biomass used in engineered structures; assessment procedures for new and existing wood products.

Schueneman, Gregory	Madison, WI	Research Materials Engineer	High Performance materials from forest biomass; coatings and surface modifications; modification of wood-derived lignocellulosic nanomaterials; structural adhesives for or derived from biomass; high value polymers from forest biomass
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International Institute of Tropical Forestry

Gould, William A.	San Juan, PR	Research Ecologist	Integrating field and remote sensing data to analyze landscape patterns and processes in a wide range of ecosystems including tropical, temperate, boreal and arctic biomes
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National Agroforestry Center

Schoeneberger, Michele	Lincoln, NE	Research Soil Scientist	Understanding and quantifying agroforestry's contributions in support of Climate Smart Agriculture; the potential of these systems to provide added adaptive capacity to agricultural operations and lands under uncertain weather and climate
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Northern Research Station

Adams, Mary Beth	Morgantown, WV	Research Soil Scientist	Management recommendations for ecosystem restoration and/or rehabilitation
Amelon, Sybill	Columbia, MO	Research Wildlife Biologist	Bat ecology and management
Brisette, John	Durham, NH	Research Forester	Natural regeneration and early stand dynamics in conifer and mixed conifer-hardwood ecosystems of the Acadian and Great Lakes forest regions
Brose, Patrick	Irvine, PA	Research Forester	Root development of oak seedlings growing in shelterwood stands; response of mountain laurel to chemical, cultural, and mechanical control practices; quantifying fuel loadings and fire behavior in oak forests; response of northern red oak seedlings to forest liming; dendroecology of xeric oak – pine forests
Brown, John P.	Princeton, WV	Research Forester	High elevation spruce forest restoration and climate change effects on site index and productivity
Clausen, Carol A.	Madison, WI	Research Microbiologist	Development of low toxicity wood protection systems; Diagnostic methods for decay and mold fungi; Mechanism of brown-rot decay
Dey, Daniel C.	Columbia, MO	Research Forester	Forest regeneration and restoration in oak/pine forests, interactions between terrestrial and aquatic systems

DonnerWright, Deahn	Rhineland, WI	Research Spatial Ecologist	Investigating movement ecology at large scales using landscape ecology, genetics, and modeling approaches to help restore and conserve wildlife populations, especially bats, pollinators, herpetofauna
Eggert, Sue	Grand Rapids, MN	Research Aquatic Ecologist	Effects of change on invertebrate ecology, food webs, organic matter dynamics, and nutrient cycling in freshwater ecosystems
Fajvan, Mary Ann	Morgantown, WV	Research Forester	Forest rehabilitation after historical high-grading harvesting practices; Silvicultural options for oak restoration in eastern forests; Silvicultural options for maintenance and restoration of eastern hemlock forests threatened by hemlock woolly adelgid
Floress, Kristin	Evanston, IL	Research Social Scientist	Impact of social factors on natural resources planning, management, conservation, and restoration across public and private lands
Gobster, Paul H.	Evanston, IL	Research Social Scientist	How nature is understood and valued by different individuals and stakeholder groups and how these values can be incorporated into landscape restoration and management
Gustafson, Eric J.	Rhineland, WI	Research Landscape Ecologist	Development and application of LANDIS-II to study the effects of climate change and management alternatives on disturbance regimes, forest composition, and spatial pattern in temperate and boreal forests around the world

Huebner, Cynthia	Morgantown, WV	Research Botanist	Invasive plant ecology, plant ecology, disturbance ecology , restoration ecology, plant taxonomy, and botany
Hutchinson, Todd	Delaware, OH	Research Ecologist	Long-term effects of prescribed fire; use of shelterwood harvests, prescribed fire, and herbicides to promote oak regeneration; invasive tree Ailanthus altissima (tree-of-heaven) in a managed forest landscape; predictive mapping of presettlement vegetation in southern Ohio
Iverson, Louis	Delaware, OH	Landscape Ecologist	Climate change impacts; Emerald ash borer; Prescribed fire and oak restoration; GIS modeling
Kabrick, John	Columbia, MO	Research Forester	Developing and evaluating silvicultural systems for sustaining native flora and fauna communities in balance with traditional forest commodities
Kenefic, Laura	Bradley, ME	Research Forester	Rehabilitation of degraded stands; ecology and silviculture of northern white-cedar, and networking and synthesis of long-term silvicultural experiments
Kern, Christel C.	Rhineland, WI	Research Forester	Short and long term influence of conventional and ecological forestry approaches on forest structure and composition; Functional diversity of understory plant communities response to silvicultural treatments; Adaptive silviculture for changing conditions
Knight, Kathleen	Delaware, OH	Research Ecologist	Effects of emerald ash borer on forest communities
Koch, Jennifer	Delaware, OH	Research Biologist	Breeding for resistance to invasive insects & pathogens; current focus on beech bark disease and emerald ash

			borer; integration of genomics with traditional tree improvement
Kolka, Randy	Grand Rapids, MN	Research Soil Scientist	Effect of land management (forest, agriculture and urban land uses) on the terrestrial and aquatic cycling of nutrients, carbon, heavy metals (notably mercury) and water
Kubiske, Mark E.	Rhineland, WI	Research Plant Physiologist	Growth and competitive dynamics of the model forest communities, modeling of canopy photosynthesis, ecosystem hydrologic balance, photosynthetic compensatory responses to insect feeding, and use of molecular markers to quantify the proportions of belowground productivity of different aspen clones in the aspen FACE experiment
McCaffrey, Sarah M.	Evanston, IL	Research Forester	Social issues around post-fire restoration; CFLRP analysis and outcomes
McKenna, Jim	West Lafayette, IN	Biologist	Tree improvement of black walnut, black cherry, northern red oak, butternut, American chestnut, and figured sugar maple that will increase productivity through improved growth rate, timber form, wood quality, and resistance to exotic disease; Identify and conserve butternut throughout the Central Hardwood Region

Miller, Gary	Morgantown, WV	Research Forester	Effect of microsite conditions on the development of advance reproduction in hardwood stands; Prediction of the competitiveness of advance oak seedlings based on pre-disturbance characteristics; Influence of reserve trees on microsite conditions, regeneration dynamics, and wildlife habitat after harvest in hardwood stands; Techniques to enhance the development of young trees after disturbance in managed hardwood.
Nislow, Keith	Amherst, MA	Research Fisheries Biologist	Adaptive management framework to implement and assess ecologically sustainable flow regimes for northeastern river systems; Determine the relationship between long-term changes in forest structure and atmospheric emissions and aquatic ecosystems and communities; Understand the role of habitat-dependent interactions between invasive and native species in structuring aquatic communities
Palik, Brian J.	Grand Rapids, MN	Research Ecologist	Understanding spatial and temporal development of structural complexity and its consequences in forests; Applying natural models of disturbance and development for restoration and management of forests
Pijut, Paula M.	West Lafayette, IN	Research Plant Physiologist	Plant cell, tissue, and organ culture for tree improvement and production; germplasm improvement to increase resistance or tolerance to biotic or abiotic stressors
Pinchot, Cornelia	Delaware, OH	Research Ecologist	Management strategies for reintroducing American chestnut to northeastern forests; Restoration of American

			elm
Poland, Therese M.	Lansing, MI	Research Entomologist	Understanding tree resistance mechanisms to insects and developing resistant trees for restoring impacted landscapes
Rebbeck, Joanne	Delaware, OH	Plant Physiologist	Ecophysiology of the major eastern hickory species; responses of hickory and oak species to prescribed fires and other forest management practices
Ristau, Todd	Irvine, PA	Research Ecologist	Role of buried seed as a mechanism in vegetation recovery; recovery of herbaceous vegetation following forest management; species competitive ability and establishment requirements
Royo, Alejandro A.	Irvine, PA	Research Ecologist	Maintenance of herbaceous species diversity in both temperate and tropical systems; potential for developing alternatives to herbicide application for the control of understory herbaceous interference; regeneration of forest systems following catastrophic wind disturbance and subsequent salvaging; impact of soil-borne pathogens on early tree establishment
Schaberg, Paul	Burlington, VT	Research Plant Physiologist	Understanding the causes and consequences of unexplained declines among tree species; Investigating the influence of climate change and pollutant deposition on tree health and productivity; Plant cold hardiness as a limitation to species restoration

Schuler, Thomas	Parsons, WV	Research Forester	Silviculture to restore Appalachian mixed-oak forests and high elevation spruce forests in the central and southern Appalachians.
Slavicek, Jim	Delaware, OH	Research Biologist	Restoration of the American elm to both natural and urban landscapes
Stoleson, Scott H.	Irvine, PA	Research Wildlife Biologist	Develop silvicultural guidelines for maintaining or enhancing habitat quality for cerulean warblers and other forest bird species of high conservation concern; Determine the local and cumulative effects of oil and gas development on forest wildlife; Understanding the frequency and costs/benefits of use of clearcuts by forest interior birds in the post-fledging period; Assessment of impacts of an herbicide tank mix on avian, mammal, and herp communities in Allegheny hardwood forests
Stout, Susan	Irvine, PA	Research Forester	Measuring crowding and diversity in forests, deer impact on forests, silvicultural systems, and translating results from ecosystem research into practical management guidelines for Pennsylvania's forests and beyond
Thomas-Van Gundy, Melissa	Parsons, WV	Research Forester	Fire regimes of the central Appalachians; Central Appalachian silviculture; Fire as a silvicultural tool in oak forests; Red spruce recovery and restoration
Thompson, Frank R.	Columbia, MO	Research Wildlife Biologist	Development of tools and technologies to assist conservation planners and managers in planning wildlife conservation at large spatial scales

Valentine, Harry	Durham, NH	Research Forester	Forest modeling and sampling; understanding of the biological processes, environmental constraints, and resource limitations that govern forest stand dynamics
Van Sambeek, J.W. "Jerry"	Columbia, MO	Research Plant Physiologist	Evaluating physiological response of hardwood seedlings and ground covers to shade or flooding
Westphal, Lynne M.	Evanston, IL	Research Social Scientist	Refine and strengthen participatory decision making and management of natural areas; Continuing the integration of social, biological, and physical disciplines in natural resources research.
Wiedenbeck, Janice	Princeton, WV	Research Forest Product Technologist	Tree and stand value effects of prescribed fire use in restoring mixed-oak forests.
Woeste, Keith	West Lafayette, IN	Research Geneticist	Population genetic analysis, development of genetic tools for assessing genetic diversity, disease resistance screening and breeding
Zalesny, Ronald S., Jr.	Rhineland, WI	Research Plant Geneticist	Genetic and physiological mechanisms regulating biomass production of short rotation woody crops (e.g., poplars and willows) grown for phytotechnologies, bioenergy, and fiber

Pacific Northwest Research Station

Anderson, Paul	Corvallis, OR	Research Forester	Ecological silviculture, restoration silviculture, riparian silviculture, physiological mechanisms of tree stress tolerance, genecology, climate change
Deal, Robert	Portland, OR	Research Forester	Applied silviculture, ecosystem services, stand development and sustainable forest management
Fried, Jeremy	Portland, OR	Research Forester	Forest inventory and model-based estimation of fire resistance, ecosystem resilience, fuels management effectiveness, restoration economics, and climate mitigation co-benefits
Grant, Gordon	Corvallis, OR	Research Hydrologist	River and watershed hydrological restoration; hydrogeomorphology; dam removal; range-riparian interactions
Gray, Andrew	Corvallis, OR	Research Ecologist	Forest inventory data application, effects of disturbance and management on forest composition and structure
Grulke, Nancy	Prineville, OR	Supervisory Research Biologist	Remote sensing of canopy and ground truth of whole tree health and response to forest management practices
Harrington, Connie	Olympia, WA	Research Forester	Responses of multiple species and multiple genotypes within species to their environment, including seed germination, flowering, and tree growth; models for predicting plant responses to the changing climate; biology and silviculture of neglected species of hardwoods, cedars, and pine; a range of silvicultural

techniques

Harrington, Timothy B.	Olympia, WA	Research Forester	Biology and management of invasive, nonnative plant species; conifer seedling growth and physiology responses to microenvironment; restoration of understory plant communities in managed conifer forests; comparative growth and yield of Douglas-fir stands; and long-term effects of forest vegetation management and thinning on stand structure
Hessburg, Paul	Wenatchee, WA	Research Ecologist	Vegetation and fuels treatments; restoration
Hummel, Susan Stevens	Portland, OR	Research Forester	How landscape and human ecology can expand silviculture at both the general and site-specific levels, developing methods that draw from the ecological and social sciences to advance knowledge of forest dynamics
Johnson, Sherri	Corvallis, OR	Research Ecologist	Riparian and stream ecology; stream water quality and hydrology; mitigation and mediation of forest management influences on riparian and stream ecology
Lehmkuhl, John F	Wenatchee, WA	Research Wildlife Biologist Emeritus	Small mammal and avian population and habitat ecology in dry forests; Developing and testing dry forest restoration prescriptions that address multiple ecological objectives
McKenzie, Don	Seattle, WA	Research Ecologist	Landscape ecology of fire, with emphasis on the effects of climate change on mountain ecosystems. Combines field-based studies, computational models, and complex-

systems theory

Olson, Deanna ("Dede") H.	Corvallis, OR	Research Ecologist	Conservation biology, behavioral ecology, population and community ecology. Effects of forest management practices, landscape designs, and policies on aquatic-dependent organisms. Interaction of climate variation with species' ecology and land management practices.
Peterson, David L.	Seattle, WA	Research Forester	Effects of environmental stress on forest ecosystems, with emphasis on fire ecology and climate change
Peterson, David W.	Wenatchee, WA	Research Forester	Applying knowledge of fire and forest ecology to the problem of restoring and maintaining ecosystem structure, function, and biodiversity in fire-prone forests and savannas
Polivka, Karl	Wenatchee, WA	Research Fish Biologist	Research into the effectiveness of in-stream habitat restoration for ESA-listed salmonid fishes in the Upper Columbia River Basin. This includes the study of the association between occupancy by fish and physical characteristics of restored habitat and behavioral and life history responses
Reeves, Gordon	Corvallis, OR	Research Fish Biologist	Conservation biology for aquatic ecosystems and organisms; climate change and aquatic ecosystems, with particular impacts on phenology; ecology and life-history variation of native fish in the Pacific Northwest; development and application of monitoring protocols

Reutebuch, Steve	Seattle, WA	Research Forester	Use of airborne laser scanning (LIDAR) for measurement and monitoring of forest structure and biomass
Reynolds, Keith	Corvallis, OR	Research Forester	Logic modeling, decision analysis, geospatial analysis, decision support, and quantitative landscape ecology; lead modeler for the USFS's national Terrestrial Condition Assessment
Rowland, Mary	La Grande, OR	Research Wildlife Biologist	Riparian restoration, including impacts on vegetation community dynamics, stream temperature, native pollinators, domestic and wild ungulates, small mammals, and fish habitat
Smith, Jane E.	Corvallis, OR	Research Botanist	Understanding the environmental effect of extreme soil heating, such that occurs with the complete combustion of large down wood during wildfires; and the short- and long-term effects of restoration fire and thinning on soil nutrients and fungi, fine root biomass, and the forest floor
Spies, Tom	Corvallis, OR	Research Forester	Landscape ecology, vegetation and disturbance dynamics, biosocial landscape interactions
St. Clair, Brad	Corvallis, OR	Research Geneticist	Understanding geographic variation in how plants are adapted to their environments and the implications for management including reforestation, restoration, tree improvement, gene conservation, and responses to climate change

White, Eric M.	Olympia, WA	Research Social Scientist	Social and economic outcomes from forest collaboration and accelerated restoration; ecological and social outcomes from collaborative natural resource management across landscapes of public and private ownership
Wilson, Todd	Corvallis, OR	Wildlife Biologist	Small mammal and prey base responses to forest, riparian, meadow, and grassland restoration treatments; Research Natural Area designation, administration, and restoration.
Wisdom, Mike	La Grande, OR	Research Wildlife Biologist	Range-riparian interactions, riparian restoration, cattle and elk interactions, dry forest fuel reduction and thinning
Wondzell, Steve	Corvallis, OR	Research Riparian Ecologist	Hyporheic zone; aquatic/riparian stream network modeling; stream temperature monitoring and modeling

Pacific Southwest Research Station

Busse, Matt D.	Davis, CA	Research Soil Scientist	Nutrient cycling processes in managed forests
Cordell, Susan	Hilo, HI	Research Ecologist	Ecophysiology, Restoration Ecology, Functional Ecology, Tropical Dry Ecosystems, Grass Invasions, Hawaiian Ecosystems
Groover, Andrew T.	Davis, CA	Research Geneticist	Regulation of growth and development across forest tree taxa, methods for evolution and development (evo-devo)

			studies of wood formation in trees
Long, Jonathan W.	Davis, CA	Ecologist	Restoration of wetlands, especially wet meadows, springs, and other headwater systems of ecological and cultural importance; Post-wildfire impacts and restoration; Forest restoration; Participatory research and traditional ecological knowledge with tribes and indigenous communities
Long, Robert P.	Irvine, PA	Research Plant Pathologist	Emerald ash borer aftermath forests; white oak decline; potential species replacements
McPherson, E. Gregory	Davis, CA	Research Forester	Effects of trees on energy use, urban heat islands, air pollutant uptake, carbon sequestration, and rainfall interception
Millar, Constance I.	Albany, CA	Research Ecologist	Dynamics of treeline ecotones, with attention to thermal constraints and microclimate feedbacks
Pope, Karen L.	Arcata, CA	Wildlife Biologist	Effectiveness of meadow restoration projects in improving conditions for biodiversity and ecosystem adaptation to climate change
Ritchie, Martin	Redding, CA	Research Mathematical Statistician	Growth and yield of mixed-conifer forests, with emphasis on dynamics of young plantations; Interdisciplinary research to quantify the effects of resource management activities (timber harvest, cattle grazing, and prescribed fire) on an array of forest components such as wildlife, sustainable productivity, and biodiversity in interior pine forests; Methods of accelerating development of late

successional forest vegetation; LiDAR applications in forestry

[Wright, Jessica W.](#)

Davis, CA

Research Plant Geneticist

Genetic tools to understand population responses to threats in our nation's forested ecosystems. These threats include climate change, pathogens and environmental stress

[Zhang, Jianwei](#)

Redding, CA

Research Forester

Using physiological, community, and ecosystem ecology as well as silviculture, soil, and modeling approach to examine the responses of terrestrial ecosystems in general and forest ecosystems in particular to climate change, land use/management, fire, and biotic disturbance in California and globally

Rocky Mountain Research Station

[Battaglia, Mike A.](#)

Fort Collins, CO

Research Forester

Forest restoration, fuel hazard mitigation, and increasing forest resilience to disturbance across multiple spatial scales

[Butler, Jack L.](#)

Rapid City, SD

Research Ecologist

Native and non-native understory responses to timber harvest and wildfire in the Black Hills; vegetation recovery following successful suppression on invasive plants;

			dynamics of plant communities associated with black-tailed prairie dogs in the Northern Great Plains
Chambers, Jeanne C.	Reno, NV	Research Ecologist	Disturbance/restoration ecology; global change processes; invasive species, especially annual grasses; arid and semi-arid shrublands, woodlands, riparian ecosystems and alpine ecosystems
Cushman, Samuel A.	Flagstaff, AZ	Research Ecologist	Landscape ecology, landscape genetics, forest ecology, climate change, wildlife ecology, disturbance ecology, population biology, landscape dynamic simulation modeling, landscape pattern analysis
Dumroese, Kasten	Moscow, ID	Research Plant Physiologist / National Nursery Specialist	Propagating and outplanting native plants; assisted migration for climate change adaptation; functional restoration of plant communities
Finch, Deborah M.	Albuquerque, NM	Biologist	Riparian restoration ecology; control of invasive riparian woody species; sagebrush restoration; avian habitat restoration; grassland, shrubland and desert ecosystems restoration
Ford, Paulette L.	Albuquerque, NM	Research Ecologist	role of disturbance, (i.e., fire, drought, infestations, pathogens), in structuring grassland, desert, and woodland communities; and ecosystem resilience.
Fornwalt, Paula J.	Fort Collins, CO	Research Ecologist	impacts of natural and human disturbances on plant populations and communities in Rocky Mountain forests

Friggens, Megan M.	Albuquerque, NM	Research Ecologist	Impacts of climate change and disturbance impacts on wildlife habitat, natural and cultural resources within grassland, desert and forested ecosystems. Assessing and modeling these impacts to inform landscape restoration and management.
Graham, Russell T.	Moscow, ID	Research Forester	Understanding long-term forest productivity and landscape processes; develop and package silvicultural systems that can be used to sustain forests in the face of climate change while provide for the values that society demand
Hahn, Beth	Missoula, MT	Wildlife Biologist	Ecological restoration in wilderness, wildlife, climate change, and disturbance ecology; adaptive management and monitoring
Jain, Terrie B.	Moscow, ID	Research Forester	Developing, implementing and evaluating management strategies that meet integrated restoration, fuels management, habitat and social objectives
Joyce, Linda A.	Fort Collins, CO	Research Rangeland Scientist	Extending climate and ecological output to assess the impacts of climate change in meaning ways to assist land managers; synthesis of adaptation theory and approaches for rangelands; developing techniques to assess the vulnerability of ecosystems and natural resources at large spatial scales and institutional scales; climate change adaptation

Kilkenny, Francis	Boise, ID	Research Biologist	Native seed biology and technology, methods for seed and seedling production; in situ and ex situ plant conservation; species interactions; invasive species biology; ecological restoration; Great Basin Native Plant Project
Kitchen, Stanley G.	Provo, UT	Research Botanist	Historic fire regimes and vegetation structure in shrubland, woodland and forest ecosystems in western US; post-fire recovery of sagebrush steppe; active and passive restoration strategies for quaking aspen in the Intermountain West; seed dormancy and germination requirements for native species and development of seed testing protocols; native plant material evaluation and selection for wildland plantings (seedlings) after disturbance; challenges in management and restoration of North American cold-deserts
Klopfenstein, Ned B.	Moscow, ID	Research Plant Pathologist	Influences of climate, disturbances, and other environmental factors on forest hosts, pathogens, and beneficial microbes
Meyer, Susan E.	Provo, UT	Research Ecologist	Regeneration biology of native Intermountain shrubs, forbs, and grasses, in the context of the ecological restoration of shrublands
Moser, W. Keith	Flagstaff, AZ	Research Forester	Disturbance and ecosystem stability; how management actions can impact stability at the stand, landscape, and regional level; likelihood of biotic disturbances and the forest structures that result, along with devising strategies

for avoidance or amelioration

Neary, Daniel G.	Flagstaff, AZ	Research Soil Scientist	Impacts of prescribed fires and wildfires on watersheds and soils; sustainable and environmentally sound use of forest bioenergy as a means of dealing with excessive fuel loadings; restoring Madrean oak savannas using prescribed fire
Page-Dumroese, Deborah S.	Moscow, ID	Research Soil Scientist	Maintaining soil productivity during and after land management activities, biochar, nutrient cycling, long-term productivity
Pinto, Jeremiah R.	Moscow, ID	Research Plant Physiologist/Tribal Nursery Specialist	Native plant nursery cultural practices and the subsequent effects of those practices on seedling physiology and outplanting; biophysical limitations on seedling success after outplanting
Rhoades, Charles (Chuck) C.	Fort Collins, CO	Research Biogeochemist	Watershed and forest biogeochemical reference conditions, disturbance responses and recovery trajectories. Designing and evaluating post-wildfire restoration in upland and stream ecosystems.
Richardson, Bryce A.	Provo, UT	Research Plant Geneticist	Population genomics, genecology, and phylogenetics of plants; using genetic approaches to address ecological interactions between plants and the environment

Schoettle, Anna W.	Fort Collins, CO	Research Plant Ecophysicologist	Physiological response of high elevation pines to multiple stresses and implications on population resiliency in a changing climate; Development of a population genetic infection model for high elevation five-needle pines to evaluate efficacy of management strategies to sustain pine population in the presence of a non-native pathogen; Identification and characterization of white pine blister rust disease resistance mechanisms and frequencies in <i>Pinus flexilis</i> , <i>P. aristata</i> and <i>P. longaeva</i> ; Regeneration and colonization dynamics of high elevation five-needle pines; Development of management strategies to sustain ecosystem function under multiple stresses.
Shaw, Nancy L.	Boise, ID	Scientist Emeritus	Native seed biology and technology, cultural practices for seed and seedling production, in situ and ex situ plant conservation, species interactions, invasive species biology, and ecological restoration
Sieg, Carolyn H.	Flagstaff, AZ	Research Plant Ecologist	Plant community and fuels changes through time following severe wildfires and how spatial patterns in forests and regeneration are altered by such disturbances and subsequent management actions.
Sing, Sharlene	Bozeman, MT	Research Entomologist	Insect-plant interactions influencing and influenced by invasive species; assessing and improving the efficacy and safety of classical weed biological control; identifying and testing candidate agents for classical biological control of weeds; identifying potential effects of climate change on

			weed biocontrol efficacy; ecological risk assessment
Sutherland, Elaine Kennedy	Missoula, MT	Research Biologist	Development and application of FHAES (Fire History Analysis and Exploration System http://fhaes.org) for historical disturbance regime analysis, dendrochronology and fire history development, understanding and comparing the process of fire-scar formation among hardwood and conifer tree species, developing restoration silvicultural approaches in western larch/mixed-conifer forests of the Northern Rockies
Warren, Steve D.	Provo, UT	Disturbance Ecologist	Ecology and management of biological soil crusts, disturbance-dependent species, the role of disturbance in ecosystem functioning and biodiversity, and remote sensing applications to biodiversity
Watson, Alan E.	Missoula, MT	Research Social Scientist	Understanding and reporting about human aspects of wilderness use and values; public and protected area visitor surveys to understand attitudes toward restoration of conditions impacted by previous human use or policies (e.g., fire, invasive species, wildlife); social barriers to restoring natural conditions
Williams, Daniel R.	Fort Collins, CO	Research Social Scientist	Improve and assess emerging collaborative governance practices in natural resource planning and decision making; apply social-geographic analysis to assess place specific meanings and values embedded in natural resource decision making

Southern Research Station

Barnett, James P.	Pineville, LA	Emeritus Scientist	Seed and seedling production
Bragg, Don C.	Monticello, AR	Research Forester	How human impacts have shaped the structure, composition, and function of our forests, and how we can adapt knowledge of past forest communities to help shape and improve contemporary silvicultural practices
Callaham, Mac	Athens, GA	Research Ecologist	Soil ecosystem responses to disturbance, invertebrate assemblage changes
Carter, Emily A.	Auburn, AL	Research Soil Scientist	soil/site disturbance assessment, forest operations impacts and recovery
Clark, Stacy	Knoxville, TN	Research Forester	Restoration of American chestnut; Forest management strategies, including regeneration harvests, thinning, fire, and herbicide treatments, to restore or maintain oak species
De Steven, Diane	Stoneville, MS	Research Ecologist Emeritus	Testing methods and models for restoring wetland and bottomland forest ecosystems; Understanding abiotic and biotic controls on vegetation diversity of wetland and bottomland forest communities
Devall, Margaret	Stoneville, MS	Research Ecologist	dendrochronology and dendrochemistry of cypress,

			reproductive biology of pondberry
Gardiner, Emile S.	Stoneville, MS	Research Forester	seedling ecophysiology and regeneration silviculture of bottomland hardwoods; use of fast-growing eastern cottonwood and black willow plantations to catalyze forest restoration
Greenberg, Katie H.	Asheville, NC	Research Ecologist	effect of forestry practices on biotic communities; fire ecology; disturbance ecology; forest food resources for wildlife
Groom, Leslie	Pineville, LA	Project Leader	physical and mechanical properties of wood-based composites
Guldin, James M.	Hot Springs, AR	Research Ecologist	ecology and silviculture of naturally regenerated forest stands; ecological restoration of forested ecosystems; application of silviculture under changing ecological, economic, and social forcing factors
Guo, Qinfeng	Research Triangle Park, NC	Research Ecologist	Patterns, processes, and mechanisms of biotic invasions at the population and community levels; Community Ecology/Biogeography; Biodiversity and ecosystem functioning
Johnsen, Kurt	Asheville, NC	Research Plant Physiologist	Forest tree growth and physiological responses to variation in water and nutrient availability, temperature, and atmospheric CO2 environment. Process model development and validation

Leininger, Theodor D.	Stoneville, MS	Research Plant Pathologist	production, protection and sustainable management of bottomland hardwoods; biofuels feedstock crop production systems for eastern cottonwood and black willow
Liu, Yongqiang	Athens, GA	Research Meteorologist	understanding forest disturbances (wildfire, land cover change, and forest water stress), their interactions with climate variability and climate change, and the environmental consequences
Maier, Chris A.	Research Triangle Park, NC	Research Biological Scientist	understanding the ecophysiological processes that regulate forest production and how these processes respond to management and climate change
Mcnab, W. Henry	Asheville, NC	Research Forester	model the composition, productivity, and distribution of relatively old and undisturbed forest vegetation in relation to environmental gradients throughout the Southern Appalachian region
Mitchell, Dana	Auburn, AL	Research Engineer	Biomass harvesting, collection and storage; small scale forestry options for small tracts; and pinyon-juniper harvesting options to improve/restore rangeland vegetation
Nelson, C. Dana	Saucier, MS	Research Geneticist	host-pathogen genetics, in particular the genetics of fusiform rust disease on slash and loblolly pines; population and quantitative genetics of the southern pines; DNA marker development and genome mapping; comparative genomics of the southern pines and related conifers

Rudolph, D. Craig	Nacogdoches, TX	Research Ecologist	Biology and management of the red-cockaded woodpecker; Ecological relationships and management of the Louisiana pine snake; Structure of Lepidopteran communities in fire-maintained pine ecosystems; Biology of the butterflies in the genus Speyeria, with emphasis on the Diana
Schaefer, Richard R.	Nacogdoches, TX	Wildlife Biologist	Home range and habitat requirements of the Louisiana pine snake (<i>Pituophis ruthveni</i>); Home range and habitat requirements of timber rattlesnakes (<i>Crotalus horridus</i>) in eastern Texas; Life history studies of the Diana fritillary (<i>Speyeria diana</i>) and great spangled fritillary (<i>Speyeria cybele</i>) in the Ouachita Mountains, Arkansas; Effects of prescribed fire on butterfly populations in the Ouachita Mountains, Arkansas
Schweitzer, Callie	Huntsville, AL	Research Forester	ecological role of disturbance in hardwood forest ecosystems of the Cumberland Plateau and associated highlands
Scott, Andy	Huntsville, AL	Research Soil Scientist	Long-Term Soil Productivity in managed forest ecosystems, with an emphasis on stands dominated by southern pines; Silvicultural and sustainability impacts of biomass harvesting from southern pine forests; Ecological restoration of forested ecosystems, with an emphasis on stands with rare or distinct soil characteristics
Stanturf, John A.	Athens, GA	Senior Scientist	understanding disturbances and their effects on forest ecosystems; managing disturbances and restoring ecosystems; and modeling and synthesis of disturbance

			processes
Sun, Ge	Raleigh, NC	Research Hydrologist	Modeling the potential effects of climate change, landuse change, and population growth on water supply and demand in the continental U.S.
Sung, Shi-Jean Susana	Pineville, LA	Research Plant Physiologist	Physiology of forest species including longleaf pine, Ponderosa pine, oaks, and American chestnut; Seedling and tree root system architecture; Tree responses to climate changes such as drought, flood, and heat and infestation of insects and diseases
Sword Sayer, Mary Anne	Pineville, LA	Research Plant Physiologist	understand seasonal and long-term ecophysiological relationships among above-ground and root/soil attributes that regulate loblolly and longleaf pine production
Trettin, Carl C.	Cordesville, SC	Team Leader	Soil carbon and nitrogen cycles; Effects of management practices and stressors on soil processes; Hydrologic controls on biogeochemical cycling in wetlands; Wetland restoration
Vose, James	Raleigh, NC	Project Leader	interdisciplinary studies investigating ecosystem responses to prescribed burning, evaluating the effectiveness of riparian zone restoration and buffer widths, and quantifying ecosystem responses to climate change, forest management activities, and insect outbreaks
Waldrop, Tom	Clemson, SC	Research Forester	Fire Ecology; Applied Fire Science; Silviculture

[Walker, Joan L.](#)

Clemson, SC

Research Plant
Ecologist

population dynamics, breeding systems, habitat
requirements of, and fire effects on rare plants in longleaf
pine communities
