Department of Land Resources and Environmental Sciences

Jack Brookshire, *Associate Professor*, Ph.D. 2006, *Virginia Polytechnic Institute and State University*; M.S. 2000, B.S. 1997, *Oregon State University*. Biogeochemistry and ecosystem analysis with emphasis on nutrient cycling and limitation. Interests include: ecosystem response and feedback to atmosphere and climate variation; watershed biogeochemistry; plant-soil interactions; natural abundance isotope analysis; ecosystem modeling; global change.
jbrookshire@montana.edu

John E. Dore, *Associate Research Professor*; Ph.D. 1995, *University of Hawaii- Minoa*; B.S. 1987, *University of California-Berkeley*. Aquatic biogeochemistry and microbial ecology; nutrient cycling and ecological stoichiometry; greenhouse gases; effects of climate variability on aquatic ecosystems; stable isotope biogeochemistry; applied phycology and microbiology.
jdore@montana.edu

Stephanie A. Ewing, *Associate Professor*; Ph.D. 2007, *University of California, Berkeley*; M.S. 2000, *University of California, Davis*; B. A. 1989, *Oberlin College*. Isotope biogeochemistry of soils in the Earth system. Effects of disturbance (pollution, climate change) on soil-atmosphere and soil-hydrology interactions. Innovative use of multiple isotope systems to explore the interaction of geochemical, geomorphic and biological processes driving biogeochemical cycling in terrestrial environments.
stephanie.ewing@montana.edu

Christine M. Foreman, *Professor and Associate Dean, College of Engineering*, Ph.D. 1999, *University of Toledo;* B.S. 1993, *Baldwin-Wallace College.* Microbial Ecology with an emphasis on the biogeochemisty of dissolved organic matter (DOM) in aquatic ecosystems. Research focus on hydrocarbon degradation in Antarctic lake ice, the effects of UV light on the bioavailability of DOM, exoenzyme activity in Antarctic lakes and biotic and abiotic particles in polar ice cores.
cforeman@montana.edu

Anthony S. Hartshorn, *Associate Professor,* Ph.D. 2003, *University of California, Davis*; B.S. 1989, *Dartmouth College*. Soil-landscape research and education. Interests include geoscience education, plant-soil interactions, soil respiration, nutrient cycling, land rehabilitation, global change.
anthony.hartshorn@montana.edu

William P. Inskeep, *Professor,* Ph.D. 1985, *University of Minnesota*; M.S. 1982, *Oregon State University*; B.S. 1979, *University of Idaho*. Study of soil and environmental chemistry including aqueous geochemistry, mineralogy, geomicrobiology, redox cycling, and chemical fate and transport. Current research projects focus on the biodegradation of hydrocarbons in soils and natural waters, the oxidation and reduction of arsenic in soils, and the geomicrobiology of acidic geothermal systems.
binskeep@montana.edu

Clain A. Jones, *Professor*, Ph.D. 1998, *Montana State University*; M.S. 1988, *University of Washington;* B.S. 1986, *Cornell University.* Developing educational resources and materials on soil fertility and nutrient management for county agents, crop advisers, producers and other agricultural professionals; current primary research emphasis on soil fertility in cropping systems, nutrient management in conservation tillage systems, and soil testing.
clainj@montana.edu

William Kleindl, *Assistant Research Professor,* Ph.D. 2014, *University of Montana, Missoula;* M.S. 1995, *University of Washington, Seattle;* B.S. 1987, *University of Wisconsin, Madison.* Socioecological research and education. Interests focus on natural dynamics coupled with human land use decisions and their effects on ecological structure, function, and services. This work crosses scale from site to continent with a focus on aquatic systems.
william.kleindl@montana.edu

Jeffrey L. Littlefield, *Research Scientist*, Ph.D. 1986, *University of Wyoming*; M.S. 1980, *University of Idaho*; B.S. & B.S.F. 1975, *University of New Hampshire*. Biological control of weeds, including the determination of host and habitat specificity, bionomics, insect-plant interactions, quarantine screening, and field release of potential bio control agents.
jeffreyl@montana.edu

Jane M. Mangold, *Professor*, Ph.D. 2004, *Montana State University*; M.S. 1997, *Montana State University*; B.S. 1994, *Iowa State University*. Development and dissemination of information about ecologically-based, integrated invasive plant management for range and wild lands. Emphasis on restoration/revegetation of invasive plant-infested landscapes.
jane.mangold@montana.edu

Bruce D. Maxwell, *Professor*; Ph.D. 1990, *Oregon State University*; M.S. 1984, B.S. 1977, *Montana State University*. Agroecology and weed biology research on the design and development of sustainable production systems and adaptive management strategies for annual and perennial weeds in crop and natural ecosystems. Includes modeling and identifying measures of invasive plant population dynamics and impacts, crop-weed competition, herbicide resistance evolution and economic thresholds of weeds.
bmax@montana.edu

Timothy R. McDermott, *Professor*; Ph.D. 1989, M.S. 1985, *University of Minnesota*; B.S. 1982, *University of Nebraska-Lincoln*. Soil and environmental microbiology. Physiology, biochemistry, and genetics of phosphorus metabolism in the rhizobia as it occurs during symbiosis with the host legume plant; Microbial and metabolic diversity in geothermally heated soils, including arsenic and metal transformations.
timmcder@montana.edu

Fabian D. Menalled, *Professor,* Ph.D. 1996**,** *University of Massachusetts;* B.S. 1985, *University of Buenos Aires-Argentina*. Cropland Weed Specialist**.** Research and extension focused on integrated management of agricultural weeds. Understanding the mechanisms conditioning the abundance and distribution of annual and perennial weeds in agricultural systems. Weed population and community dynamics, crop-weed competition, herbicide resistance, and weed management in conventional and alternative cropping systems.
menalled@montana.edu

Perry R. Miller, *Professor*, Ph.D. 1992, *University of Minnesota;* M.S. 1989, *University of Guelph;* B.S. 1984, *University of Saskatchewan*. Development of diversified cropping systems under water-limited conditions to maintain or improve soil quality, economic returns and sustainable practices. Resource-use-efficiency in no-till and organic systems, spring and winter pulse crop agronomy, annual pea forage and green manure systems, and farming strategies for reducing greenhouse gas emissions.
pmiller@montana.edu

MONTANA STATE UNIVERSITY

Kevin M. O'Neill, *Professor*, Ph.D. 1981, M.S. 1978, *Colorado State University*; B.S. 1975, *Syracuse University*. Insect behavior and ecology, with particular reference to foraging, pollination, thermoregulation and parental strategies; influence of land management practices on insect communities; biological constraints on insect population and community sampling.
koneill@montana.edu

Robert A. Payn, *Associate Professor,* Ph.D. 2009, *Colorado School of Mines*; M.S. 2004 *Virginia Tech*; B.S. 1993, *The Ohio State University*. Role of water movement in the structure and function of watershed ecosystems; integration of biogeochemical and hydrologic models; inference of watershed ecosystem behavior from spatially distributed stream water quantity and quality; influence of valley floor hydrologic systems on whole-watershed behavior and on stream-riparian ecosystem behavior.
rpayn@montana.edu

Robert K. D. Peterson, *Professor*, Ph.D. 1995, M.S. 1991, *University of Nebraska;* B.S. 1987, *Iowa State University*. Human and ecological risk assessments for agricultural technologies, physiological responses of plants to biotic stressors, plant-insect interactions, economic decision level theory and development, and integrated pest management theory.
bpeterson@montana.edu

Geoffrey C. Poole, *Professor*, Ph.D. 2000, *University of Montana*; M.S. 1989, *Utah State University*; B.S. 1987, *Cornell University*. Emphasis on river ecology, fluvial geomorphology and landscape ecology. Special interests include the ecology of the hyporheic zone, influence of floodplain geomorphology or in-stream habitat quality and linkages between riverine habitat diversity and biological diversity.
gpoole@montana.edu

Scott Powell, *Associate Professor*, Ph.D. 2004, *Montana State University*; M.S. 1997, *Duke University*; B.A. 1993, *Macalester College*. Forest ecology and dynamics; integration of remote sensing data, GIS, and field data for ecological applications; modeling aboveground biomass and carbon sequestration; land cover and land use change analysis; and invasive species monitoring.
spowell@montana.edu

John C. Priscu, *Regents Professor*; Ph.D. 1982, *University of California- Davis*; M.S. 1978, B.S. 1975, *University of Nevada-Las Vegas*. Microbial biogeochemistry in aquatic systems. Life associated with Antarctic ice and its relationship to global change, astrobiology and geomicrobiology.
jpriscu@montana.edu

Ann Marie Reinhold, *Assistant Research Professor,* Ph.D. 2014, *Montana State University;* M.S. 2008, *Duke University;* B.A. 2004 *University of Colorado-Boulder*. Hydroecology and riverine landscape ecology. Instantiating ecological theory in the development and application of quantitative tools to address pressing environmental problems.
reinhold@montana.edu

Lisa J. Rew, *Professor,* Ph.D. 1993, *University of Reading, UK;* BSc (Hons) 1988 *University of Southampton, UK.* Weed ecology research, including sampling and predicting weed distributions, and impacts, in agricultural and wildland systems to improve management efficiency and environmental sustainability.
lrew@montana.edu

Timothy F. Seipel, *Assistant Research Professor & Associate Cropland Weed Specialist,* Ph.D. 2012, *ETH-Zurich;* M.S. 2006 *Montana State University*; B.S. 2003 *Montana State University.* Plant and agricultural ecology research focused on patterns and processes associated with biodiversity; including extension focused on sustainable management of agricultural weeds.
timothy.seipel@montana.edu

Tracy M. Sterling, *Professor and Department Head*, Ph.D. 1988, *University of Wisconsin*; M.S. 1985, *Michigan State University*; B.S. 1983, *University of Minnesota*. Weed physiology research centering on understanding how environmental, insect and herbicide stresses influence crop and weed productivity. Emphasis on role of oxidative stress tolerance mechanisms in weed/crop interactions, and alkaloid biosynthesis by the locoweed/endophyte complex.
tracy.sterling@montana.edu

David K. Weaver, *Professor*, Ph.D. 1990, *McGill University*; B.S. 1984, *Dalhousie University*. Chemical ecology and behavior, biological control, plant-insect interactions, and spatial ecology. Research includes plant and insect semiochemical interactions, biological control of insects and weeds in agricultural and rangeland communities, host plant resistance, and stored-product entomology.
weaver@montana.edu

Catherine A. Zabinski, Pr*ofessor*; Ph.D. 1991, *University of Minnesota*; B.A. 1983, *College of St. Benedict, Minn.* Teaching focus on restoration ecology and plant and soil ecology. Research interests in belowground plant ecology, invasive species biology, and restoration ecology, with an emphasis on soil biota.
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