

RANDALL K. KOLKA

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EDUCATION

*Ph.D. (July 1996) - University of Minnesota, Advisors David F. Grigal and Edward A. Nater
Major - Soil Science, Minors - Water Resources and Forest Resources
Dissertation: "Hydrologic transport of mercury through forested watersheds."*

*M.S. (July, 1993) - University of Minnesota, Advisors David F. Grigal and Edward A. Nater
Major - Soil Science, Minor - Forest Resources
Thesis: "Cation release rates from weathering of five Upper Great Lakes forest soils."*

*B.S. (Dec., 1990) - University of Wisconsin - Stevens Point, Advisor - Aga Razvi
Major - Soil Science, Minor - Business Management*

RESEARCH INTERESTS

I conduct sound watershed or landscape level soil and hydrological research involving upland, riparian and wetland soil carbon and nutrient dynamics and relating these studies to upland land use and pollution transport to surface waters. I investigate ecosystem restoration and the linkages between upland and riparian or wetland communities. Also, I'm interested in research addressing soil and geologic mineral-water interactions, and the functions and implications of global climate change.

TEACHING EXPERIENCE

Guest Lecturer, *Integrated Topics in Land and Atmospheric Sciences*, University of Minnesota – 2012.
Guest Lecturer, *Wetland Ecology*, Central Lakes College – 2009-2012.
Guest Field Lecturer, *Graduate Student Soils Field Trip*, University of Minnesota – 2006-2010.
Guest Lecturer, *Watershed Management*, Lakehead University, Thunder Bay, Canada – 2006.
Guest Lecturer, *Hydrology and Watershed Management*, University of Minnesota - 2004
Guest Lecturer, *Restoration Ecology*, Lakehead University, Thunder Bay, Canada - 2003.
Guest Field Talk, *Graduate Student Soils Field Trip*, University of Minnesota - 2003.
Professor - Environmental Science Field Station, *Soil and Hydrology* – 1999-2001
Assistant Professor - University of Kentucky, *Riparian Forests: Management, Ecology and Restoration* – 2000
Assistant Professor - University of Kentucky, *Integrated Forest Management* – 1999-2001
Assistant Professor - University of Kentucky, *Forest Watershed Management* – 1998-2001
Guest Field and Class Lecturer, Environmental Science Field Station, *Introduction to Environmental Science* - 1998
Guest Field Talk - Mercer University, *Environmental Engineering* - 1998
Guest Lecturer - College of Charleston, *Wetlands Soil and Hydrology* - 1998
Guest Field Talk - University of Georgia, *Wetlands Ecology* - 1997
Instructor - *Introduction to Soil Science, Soil Survey and Land Use Planning*, Department of Geography, University of Wisconsin-Eau Claire, 1995-1996

Mean Student Evaluation Score for Courses Taught at the University of Kentucky: 3.6/4.0, University Average: 3.3/4.0

PROFESSIONAL POSITIONS

January 2002 to Present – Project/Team Leader and Research Soil Scientist, USDA Forest Service, Northern Research Station

Currently, I'm the team leader of USDA Forest Service Research Work Unit in Grand Rapids, MN. My work unit specializes in watershed and aquatic research. I administrate the unit as well as performing my own research on riparian, wetland and aquatic systems.

July 1998 to January 2002 - Assistant Professor of Forest Hydrology and Watershed Management, Department of Forestry, University of Kentucky

June 1996 to July 1998 – Research Soil Scientist, USDA Forest Service, Southern Research Station

1991- 1996 - Research Assistant, Department of Soil Science, University of Minnesota

Fall 1995 - Instructor, Department of Geography, University of Wisconsin-Eau Claire

1994-1995 - Soil Scientist, USDA Forest Service, North Central Research Station, part-time

1992-1993 - Data Quality Control Specialist, State Climatology Office, part-time

1993 - Sampling and Field Supervisor, Global Climate Change Project

1990 - Wind Erosion Technician, Central Sands Erosion Control Project, Stevens Point, WI.

PROFESSIONAL SKILLS

I'm proficient with the operation of ICP, AA, XRD, SEM, CVAFS (Hg analysis), carbon, nitrogen and phosphorus analysis, uv spectrophotometry, neutron probes, tensiometers, wells and piezometers, thermocouples and suction cup samplers. I have extensive experience with tree growth, water chemistry and hydrologic models, vegetation identification and sampling, soil sampling and mapping, litterfall and precipitation sampling, assessment of fish, invertebrate and plankton communities, forest and wildlife management techniques, forest mensuration techniques, land surveying, stream and lake structure mapping, stream gauging, stream classification, water table and piezometric surface mapping, clean sampling techniques, GPS and GIS applications, basic and FORTRAN programming languages.

PROFESSIONAL MEMBERSHIPS

Soil Science Society of America
Society of Wetland Scientists
American Water Resources Association
Society of American Foresters

JOURNAL REVIEWER

Journal of Environmental Quality
Wetlands
Ecological Engineering
Soil Science Society of America Journal
American Water Resources Association Journal
Environmental Science and Technology
Environmental Pollution
Journal of Hydrology
Water, Air and Soil Pollution
Landscape Ecology
Journal of Environmental Engineering Science
Forest Ecology and Management
Canadian Journal of Forest Research
Climate Change
Polish Journal of Environmental Studies
Journal of Forestry
Biogeochemistry
Journal of Geophysical Research – Biogeosciences
Agricultural and Forest Meteorology
Geoderma
Agroforestry Systems
Science of the Total Environment
Transactions of the American Society of Agricultural

and Biological Engineers
Sustainability

PROFESSIONAL CONTRIBUTIONS

Subject Area Representative Ecology and Biology Subject Area, and Member of the Forest Science and Technology Board – Society of American Foresters, 2006-2010

EDITORIAL POSITIONS

Editorial Board, *Soil Science, International Scholarly Research Network (ISRN)*, online journal, 2011-present.

Associate Editor, *Wetlands*, 2006-2009.

Associate Editor, *Journal of Environmental Monitoring and Restoration*, 2000-present.

Ecosystems Restoration and Creation Annual Conference Editorial Review Committee, 1997-present.

CURRENT FACULTY APPOINTMENTS

Faculty of Graduate Studies, Faculty of Natural Resources Management, Lakehead University

Adjunct Professor, Department of Biological Sciences, North Dakota State University

Associate Faculty, Department of Natural Resource Ecology and Management, Iowa State University

Adjunct Professor, Department of Forest Resources, University of Minnesota

Adjunct Professor, Department of Soil, Water and Climate, University of Minnesota

Graduate Faculty, Department of Forestry, University of Kentucky

Adjunct Professor, School of Forest Resources and Environmental Science, Michigan Technological University

ADVISORY POSITIONS

2012- present, Great Lakes Restoration Initiative (GLRI) Science Subgroup, Advising GLRI on Scientific Priorities

2011- present, Intergovernmental Panel on Climate Change (IPCC), Lead Author Preparing Supplement for Guidelines to Develop Greenhouse Gas Emissions from Wetlands

2011- present, Science Team Advising the Implementation of Minnesota Climate Change Response Framework

2011- present, National Atmospheric Deposition Program (NADP) Total Deposition Science Committee

2011- present, National Atmospheric Deposition Program (NADP) Advisory Group, Development of Mercury Litterfall Network

2008 - present. Natural Resources Research Institute (NRRI) Advisory Board (University of Minnesota - Duluth)

BOOK REVIEWER

Walker, R.L., J. Walker, and R.J. Hobbs. 2008. Linking Restoration and Ecological Succession. Springer Publishing. *Ecology*, 89(3): 886.

Hey, D.L. and N.S. Philippi. 2000. A Case for Wetland Restoration. John Wiley & Sons Inc. *Journal of Natural Resources and Life Sciences Education*, 29: 167.

OTHER REVIEWS

2012. Book proposal review for the Higher Education Press.

2012. Review of the *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands* for the Intergovernmental Panel on Climate Change (IPCC)

2011. Review of Senior Associate Dean for Research and Graduate Programs, College of Food, Agricultural and Natural Resource Sciences, University of Minnesota

2011. Minnesota Climate Change Response Framework Science Team

2011. Review of Federal Interagency: “National Action Plan to Manage Freshwater Resources in a Changing Climate”

2011. Review of the “Minnesota Forest Resources Council on Minnesota Forest Resources Research: Assessment and Needs”

2011. Review of Department Head, Department of Forest Resources, University of Minnesota

2011. Review of Special Issue for the *Journal of Forestry* on *Managing Forests Because Carbon Matters: Integrating Energy, Products, and Land Management*

2010. Review of University of Wisconsin – Platteville’s Pioneer Farm Watershed Research Program

2010. Review (for Forest Service) the US Geological Survey’s Program for the “Development of a Methodology for National Assessment of Ecological Carbon Stocks, Carbon Sequestration, and Greenhouse Gas Fluxes”

2009. Hiring Committee, Assistant Professor of Pedology, Department of Soil, Water and Climate, University of Minnesota.
2009. Review of Wisconsin Water Quality Guidelines for Forestry Operations
2008. Review of Special Issue for the Journal of Forestry on *Forest Management Solutions for Mitigating Climate Change in the United States*
2008. Review of the Department of Natural Resources and Ecology Research, Education and Extension Programs, Iowa State University.
- 2005-2008. Riparian Science Technical Committee, Minnesota Forest Resources Council
2007. Northern Research Station Co-representative on the Forest Service R&D National Program Review for the Water, Air, and Soil Sponsored Program Area.
2007. Forest Service R&D Wilderness Review Team, and Wilderness Review Response Team.
2007. Long-term trends from collaborative ecosystem research in the Hubbard Brook Valley, New Hampshire by Campbell et al. FS General Technical Report.
2006. Province of Manitoba Riparian Guidelines.

PROPOSAL REVIEW COMMITTEES

- EPA STARS Scholarship Review Panel, Climate Change Section, 2012. Washington D.C.
- University of Wisconsin Water Resources Institute, Adhoc Reviewer, 2012.
- NSF Arctic Sciences Program, Adhoc Reviewer, 2012.
- Earthwatch Institute Adhoc Reviewer, 2011.
- NSF Geobiology and Low-Temperature Geochemistry Program Adhoc Reviewer, 2010.
- EPA STARS Scholarship Review Panel, Climate Change Section, Adhoc Reviewer, 2010.
- EPA STARS, Forecasting Ecosystem Services from Wetland Condition Analysis Review Panel. 2009. Washington D.C.
- USDA NRI Soil Processes Adhoc Reviewer, 2008.
- USDA NRI Soil Processes Adhoc Reviewer, 2007.
- British Columbia Forest Science Program, Hydrology Section. 2007.
- British Columbia Forest Science Program, Hydrology Section. 2006.
- NSERC Proposal Site Review. 2005. Whitecourt, Alberta, Canada.
- British Columbia Forest Science Program, Hydrology Section. 2005.
- EPA STARS Scholarship Review Panel, Terrestrial Systems and Ecology Section. 2005. Washington D.C.
- British Columbia Forest Science Program, Hydrology Section. 2004.
- EPA STARS Scholarship Review Panel, Terrestrial Systems and Ecology Section. 2004. Washington D.C.
- USDA NRI Watershed Processes and Water Resources Review Panel. 2002. Washington D.C.
- EPA STARS Scholarship Review Panel, Terrestrial Systems and Ecology Section. 2001. Washington D.C.
- University of Kentucky College of Agriculture Undergraduate Scholarships. 2000.
- USDA Water Quality Competitive Grants. 2000. Washington D.C.
- EPA STARS Scholarship Review Panel, Terrestrial Systems and Ecology Section. 2000. Washington D.C.
- EPA/NSF/USDA Competitive Grant Review Panel, Water and Watersheds Section. 1999. Washington D.C.

POST DOCTORAL/VISITING SCIENTIST ADVISOR/CO-ADVISOR

- Dr. Olha Furman, Post Doctoral Scholar, University of Minnesota, Department of Soil, Water and Climate. 2012-Ongoing. Project Title: Mercury and Sulfur Dynamics in the SPRUCE Experiment.
- Dr. Emma Witt, Post Doctoral Scholar, University of Minnesota, Department of Soil, Water and Climate. 2012-Ongoing. Project Title: Development of Best Management Practices For Mercury Contamination Following Fire: Implications for Ecosystem Restoration.
- Dr. Matt Powers, Post Doctoral Scholar, Michigan Technological University, School of Forest Resources and Environmental Science. 2009-2011. Project Title: Effects of Red Pine Thinning and Stand Age on Ecosystem Carbon Pools and Fluxes.
- Dr. Marlín Pérez Suárez, Post Doctoral Scholar, Iowa State University, Department of Natural Resource Ecology and Management. 2009-2012. Project Title: Ecosystem Structure and Function in Watersheds with Contrasting Annual-Perennial Plant Community Configurations.
- Dr. Yuchuan Ding, Visiting Scientist from the Shanxi Academy of Agricultural Sciences. Co-hosting at the Department of Natural Resource Ecology and Management, Iowa State University. 2009. Project Title: Understanding Above and Belowground Nutrient Cycling in Agroecosystems.
- Dr. Peter Weishampel, Post Doctoral Scholar, University of Minnesota, Department of Soil, Water and Climate. 2004-2008. Project Title: Carbon Processes in Peatland Landscapes.

Dr. Mark Gabriel, Post Doctoral Scholar, University of Minnesota, Department of Soil, Water and Climate. 2005-2007. Project Title: Prescribed Fire Effects on Watershed Cycling of Mercury in the Boundary Waters Canoe Area.

GRADUATE STUDENT ADVISOR OR CO-ADVISOR

Ben Roush, M.S., University of Minnesota, Department of Forest Resources. Ongoing. Dissertation Title: TBD.

Nancy Serediak, Ph.D., Lakehead University, School of Forestry and the Environment. Ongoing. Dissertation Title: TBD.

Aleta Daniels, M.S., Michigan Technological University, School of Forest Resources and Environmental Science. Ongoing. Thesis Title: TBD.

Mikayla Boche, M.S., North Dakota State University, Department of Soil Science. Ongoing. Thesis Title: TBD.

Salli Dymond, Ph.D., University of Minnesota, Department of Forest Resources. Ongoing. Dissertation Title: TBD.

Todd Ontl, Ph.D., Iowa State University, Department of Natural Resource Ecology and Management. Ongoing. Dissertation Title: TBD.

Tomorra Smith, M.S., Iowa State University, Department of Agronomy. 2012. Thesis Title: Effect of native perennial buffer strips on dissolved organic carbon on surface runoff from an agricultural landscape.

Joe Shannon, M.S., University of Minnesota, Department of Forest Resources. 2011. Thesis Title: Canopy Transpiration and Water Yield Changes Following Forest Canopy Conversion in Northern Minnesota.

Joan Spence, M.S., University of Minnesota, Department of Forest Resources. 2010. Thesis Title: Spatial and Temporal Pattern of N₂O Flux in an Upland-Bog Watershed.

Emma Witt, M.S., University of Minnesota, Department of Soil, Water and Climate. 2007. Thesis Title: Atmospheric Deposition of Total and Methyl Mercury in Boreal Forests and Response to Forest Fire.

Jason McClure, M.S., Michigan Technological University, School of Forest Resources and Environmental Science. 2006. Thesis Title: Hydrologic Contributions to Baseflow for a Northern Old Growth Riparian Area.

Jamie Svec, M.S., University of Kentucky, Department of Forestry, 2002. Thesis Title: Defining Perennial, Intermittent and Ephemeral Channels in Eastern Kentucky; Application to Forestry Best Management Practices.

Amanda Abnee, M.S., University of Kentucky, Department of Agronomy, 2001. Thesis Title: Effect of Slope Position and Aspect in Carbon Mineralization and Sequestration in Eastern Kentucky Landscapes.

Chris Coulter, M.S., University of Kentucky, Department of Agronomy, 2001. Thesis Title: Influence of Urbanization on the Transport of Sediment and Nutrients to Streams.

Eric Byrd, M.S., University of Kentucky, Department of Forestry, 2001. Thesis Title: Evaluation of Infiltration and Surface Runoff on Reclaimed Non-Compacted Mine Spoil Soils.

GRADUATE STUDENT COMMITTEES

Usman Anwar, M.S., Iowa State University, Department of Natural Resource Ecology and Management. Ongoing. Thesis Title: TBD.

Joshua Davis, Ph.D., Michigan Technological University, School of Forest Resources and Environmental Science. Ongoing. Thesis Title: TBD.

Cassandra Ott, M.S., Michigan Technological University, School of Forest Resources and Environmental Science. Ongoing. Thesis Title: TBD.

Lindsey Seifert, M.S., University of Minnesota Duluth, Department of Biology. Ongoing. Thesis Title: TBD.

Michaeleen Gerken, Ph.D., Iowa State University, Department of Natural Resource Ecology and Management. Ongoing. Dissertation Title: TBD.

Aicam Laacouri, M.S., University of Minnesota, Department of Soil, Water, and Climate. 2012. Thesis Title: Mercury Distribution Within Leaves of Deciduous Trees in Minnesota: Intra-seasonal and Inter-seasonal Accumulation.

Emma Witt, Ph.D., University of Kentucky, Department of Soil and Plant Science. 2012. Dissertation Title: Evaluating streamside management zone effectiveness in Appalachian forested watersheds.

Brooke Haworth, M.S., University of Minnesota, Department of Forest Resources. 2011. Thesis Title: Response of *Thuja Occidentalis* and *Abies Balsamea* to Stand Manipulations in Northern Minnesota Riparian Forests.

Adam Guy, M.S., North Dakota State University, Department of Soil Science. 2011. Thesis Title: Impacts of Major Flooding on Water and Sediment Quality in an Urban Environment.

Anne Timm, Ph.D., Virginia Tech University, Department of Fisheries and Wildlife Sciences. 2011. Dissertation Title: Biological Success Criteria for Prioritization and Monitoring of Stream Crossing Improvement Projects.

- Matthew Bischof, M.S., North Dakota State University, Department of Biological Sciences. 2010. Thesis Title: Influence of Adjacent Uplands and Groundwater on the Hydrology and Invertebrate Community Composition in Seasonal Forest Ponds of North Central Minnesota.
- David Pelster, Ph.D., Lakehead University, School of Forestry and Environment. 2009. Dissertation Title: Development of Key Components of a Nitrogen Budget for a Forested Watershed on the Canadian Boreal Plain.
- Michelle Martin, M.S., University of Minnesota, Department of Forest Resources. 2008. Riparian Plant Composition, Abundance, and Structure Responses to Different Harvesting Approaches in Riparian Management Zones Nine Years After Treatment in Northern Minnesota, U.S.A.
- Melissa Cheatham, M.S., Iowa State University, Department of Natural Resource Ecology and Management. 2007. Thesis Title: Species and Functional Diversity Effects on Productivity and Nutrient Uptake: Implications for Designing Sustainable Agricultural Systems in the Midwest.
- Ryan Maher, M.S., Iowa State University, Department of Natural Resource Ecology and Management. 2007. Thesis Title: Soil Respiration and Plant Growth Across a Chronosequence of Tallgrass Prairie Reconstructions.
- Dan Tersteeg, M.S., University of Minnesota, Department of Soil, Water and Climate. 2007. Thesis Title: Landscape and Harvesting Effects on Seasonal Wetland Hydrology.
- Jeremy Steil, M.S., University of Minnesota, Department of Forest Resources. 2007. Thesis Title: Effects of Timber Harvesting on Windthrow Activity and Coarse Woody Debris Attributes in Mixed Conifer-Deciduous Riparian Forests in Northern Minnesota.
- Jaclyn Sumner, M.S., North Carolina State University, Department of Soil Science. 2006. Thesis Title: Methods to Evaluate Normal Rainfall for Short-Term Wetland Hydrology Assessment.
- Danielle Andrews, M.S., University of Kentucky, Department of Forestry. 2006. Thesis Title: Vegetation Establishment, Hyporheic Zone Development, and Water Quality Improvement in a Restored Riparian Area.
- Rachel Tarpey, M.S., Michigan Technological University, School of Forest Resources and Environmental Science. 2006. Thesis Title: The Long-term Effects of Silvicultural Thinning on Soil Physical Properties and Carbon Pools in a Red Pine (*Pinus resinosa* Ait.) Forest.
- Alex Cherry, M.S., University of Kentucky, Department of Forestry. 2006. Thesis Title: Hydrochemical Characterization of Ten Headwater Catchments in Eastern Kentucky.
- Doug Kastendick, M.S., University of Minnesota, Department of Forest Resources. 2005. Thesis Title: Riparian Forest Management in Northern Minnesota.
- Aaron Steber, M.S., University of Minnesota, Department of Forest Resources. 2005. Thesis Title: Soil Compaction Effects on Site Productivity and Organic Matter Storage in Aspen Stands of the Great Lakes States
- Eric Anderson, Ph.D., North Carolina State University, Department of Soil Science, 2004. Dissertation Title: Landscape Influences on Soil Carbon Storage in the Coastal Plain of North Carolina.
- Scott Shouse, M.S., University of Kentucky, Department of Forestry, 2001. Thesis Title: Costs Associated with Forestry BMP Implementation in Kentucky.
- Brian Sandefur, M.S., University of Kentucky, Department of Agronomy, 2001. Thesis Title: Soil, Hydrology and Vegetation Characterization of Mountain Bog Systems.
- Laura Giese, Ph.D., Virginia Tech University, Department of Forestry, 2001. Dissertation Title: Riparian Forest Restoration: Methods of Assessing Functional Recovery.
- George Landman, M.S., University of Georgia, Botany Department, 2000. Thesis Title: Seed Bank Characterization of Pen Branch Corridor and Delta in Relation to Restoration.

EXTERNAL EXAMINER

- Chris Barton, Ph.D., University of Kentucky, Department of Forestry. 2007. External Reviewer for Tenure and Promotion Committee.
- Paul Hazlett, Ph.D., University of Guelph, Department of Environmental Biology. 2006. Thesis Title: Carbon and Nitrogen Dynamics in Forested and Clearcut Boreal Soils: Issues for Riparian Forest Management.

TRAININGS GIVEN

All Employee Climate Change Workshop, Chippewa National Forest. 2011. Day long training to introduce the employees of the Chippewa National Forest to concepts, findings and application of knowledge to conduct their jobs in light of climate change. Attendance was approximately 85. Kolka was a member of the organizing committee and Kolka co-lead a section on the climate change impacts on water and aquatic ecosystems.

At the Water's Edge: Current State of Riparian Forest Management. 2008. Three day training based on the results from several long-term riparian harvest studies were presented to an audience of resource managers, loggers, industry employees, and citizens during a three-day conference of oral presentations and field tours. Kolka was a member of organizing committee, gave broad overview of the various studies and co-led aquatic portion of field tour.

Minnesota Woodland Owners Extension Program. 2003. Kolka did a two hour session on forest soils. Mankato, MN.

State Kentucky's Riparian Committee. 1998-1999. We developed training modules for Riparian Zone Management to be given to county agents and state natural resource employees.

CONFERENCE AND SESSION ORGANIZER

2007. Poster Session, Annual Society of American Foresters Conference, Portland, Oregon.

2007. Symposium on Ecohydrology, Ecosummit 2007, Beijing, China.

2007. Symposium on Linking Aquatic Sciences and Management: Small Watershed Studies in North American Forested Landscapes, Congress of the International Association of Theoretical and Applied Limnology, Montreal, Canada.

HONORS AND AWARDS

Superior Performance Award, 2006-2012, USDA Forest Service

Session Best Poster Presentation, 2012, SSSA Conference, Forest and Wildland Soil, Cincinnati, OH.

Certification of Appreciation for Peer Review, 2011, American Chemical Society

William and Anne Manierre Award, 2010, Publication of Exemplary Research on the Huron Mountains

Society of Wetland Scientists, 2009, Appreciation for Associate Editorship

Outstanding Performance Award, 2005, USDA Forest Service

Certificate of Appreciation, Contributing to Wilderness Program Area Review, 2007.

Chief's Rise to the Future Award, For Outstanding Collaborative Research, 2006.

Certificate of Merit, Outstanding Performance as Acting NC Research Station Assistant Station Director, 2005.

Rise to the Future Award, Region 9 National Forests, For Outstanding Collaborative Research, 2005.

Certificate of Recognition, Teaching Excellence, Environmental Sciences Field Station, 1999

Vice Presidents Award, 1998, Savannah River Technology Center

Superior Performance Award, 1997, USDA Forest Service

Spot Award, 1997, USDA Forest Service

Best Session Poster Presentation, 1995, SSSA Conference, Forest and Wildland Soils, St. Louis, MO.

Martin Travel Scholarship 1991 and 1995

Graduate School Block Grant Fellowship, 1994

Graduate School Travel Grant, 1994

Wisconsin Garden Club Federation Scholarship, 1990

UWSP Soil Judging Team, 1990, Regional Contest, Waseca, MN, 3rd place.

UWSP Soil Judging Team, 1990, National Contest, Purdue University, 9th place.

LaVern Wiedenhoft Memorial Scholarship, 1989

Wisconsin Fertilizer and Chemical Association Scholarship, 1989

National Agronomy Recognition Award, 1989

UCLCC Scholarship, 1988

Izaak Walton League Scholarship, 1988

EDITOR FOR BOOK/SPECIAL JOURNAL ISSUE

Kolka, R.K., S.S. Sebestyen, E.S. Verry, and K.N. Brooks (Eds.). 2011. *Peatland Biogeochemistry and Watershed Hydrology at the Marcell Experimental Forest*. CRC Press, Boca Raton, FL, 488 pp.

Shepard, J.P., W.M Aust, C.A. Dolloff, G.G. Ice and R.K. Kolka (Eds.). 2004. *Forestry Best Management Practices Research in the Eastern United States: The State of the Science 2002*. Special Journal Series, Water, Air, and Soil Pollution: Focus. Vol. 4(1). Springer Publishing, 307 pp.

Nelson, E.A., R.K. Kolka, C.C.Trettin, and J. Wisniewski (Eds.). 2000. *Restoration of a Severely Impacted Riparian Wetland System - The Pen Branch Project*. Special Journal Series, Ecological Engineering. Vol. 15, Suppl. 1. Elsevier Publishing, 189 pp.

PUBLICATIONS

- Gerken, M.E., J.R. Thompson, C.M. Mabry, and R.K. Kolka. 2013. An investigation of water nutrient levels associated with forest vegetation in highly altered landscapes. *Journal of Soil and Water Conservation*. (in press)
- Bischof, M.M., M.A. Hanson, M.R. Fulton, R.K. Kolka, S.D. Sebestyen, and M.G. Butler. 2013. Invertebrate community patterns in response to hydrology and environmental variables in seasonal ponds in Minnesota, USA. *Wetlands*. (in press)
- Witt, E.L., C.D. Barton, J.W. Stringer, D.W. Bowker, and R.K. Kolka. 2013. Evaluating Best Management Practices for ephemeral channel protection following forest harvest in the Cumberland Plateau. *Southern Journal of Applied Forestry*. (in press)
- Gottfried, G.J., P.F. Ffolliott, K.N. Brooks, R.K. Kolka, C.B. Raish, and D.G. Neary. 2013. Contributions of studies on experimental forests to hydrology and watershed management. In Springer, New York. (in press)
- Vose, J.M., W.T. Swank, M.B. Adams, D. Amataya, J. Campbell, S. Johnson, F. Swanson, R. Kolka, A. Lugo, R. Musselman, and C. Rhoads. 2013. The Role of Experimental Forests and Ranges in the Development of Ecosystem Science and Biogeochemical Cycling Research. In Springer, New York. (in press)
- Hernandez-Santana, V., X. Zhou, M.J. Helmers, H. Asbjornsen, R. Kolka, and M. Tomer. 2013. Native prairie filter strips reduce runoff from hillslopes under annual row-crop systems in Iowa, USA. *Journal of Hydrology*, 447: 94-103.
- Miesel, J., P.C. Goebel, R.G. Corrace, D. Hix, R. Kolka, B. Palik, and D. Mladenoff. 2012. Fire effects on soils in Lake States forests: A compilation of published research to facilitate long-term investigations. *Forests*, 3: 1034-1070.
- Kastendick, D.N., E.K. Zenner, B.J. Palik, R.K. Kolka, and C.R. Blinn. 2012. Effects of harvesting on nitrogen and phosphorus availability in riparian management zone soils in Minnesota, USA. *Canadian Journal of Forest Research*, 42: 1784-1791.
- Helmers, M.J., X. Zhou, H. Asbjornsen, R. Kolka, M.D. Tomer, and R.M. Cruse. 2012. Sediment removal by perennial filter strips in row-cropped ephemeral watersheds. *Journal of Environmental Quality*, 41(5): 1531-1539.
- Parsekian, A.D., L. Slater, S.D. Sebestyen, R.K. Kolka, D. Ntarlagiannis, J. Nolan, and P. Hanson. 2012. Comparison of uncertainty in peat volume and soil carbon estimated using GPR and probing. *Soil Science Society of America Journal*, 76(5): 1911-1918.
- Coleman Wasik, J.K., C.J.P. Mitchell, D.E. Engstrom, E.B. Swain, B. Monson, S.J. Balogh, J.D. Jeremiason, B. Branfireun, S.L. Eggert, R.K. Kolka, and J.E. Almendinger. 2012. Methylmercury declines in a boreal peatland when experimental sulfate deposition decreases. *Environmental Science and Technology*, 46: 6663-6671.
- Brooks, R.T., S.L. Eggert, K.H. Nislow, R.K. Kolka, C.Y. Chen, and D.M. Ward. 2012. Mercury accumulation in seasonal forest pools. *Wetlands*, 32: 653-663.
- Jurgensen, M., R. Tarpey, J. Pickens, R. Kolka, and B. Palik. 2012. The long-term effects of silvicultural thinnings on soil carbon and nitrogen pools. *Soil Science Society of America Journal*, 76: 1418-1425.
- Mitchell, C.P.J., R.K. Kolka, and S. Fraver. 2012. The singular and combined effects of blowdown, salvage logging and wildfire on forest floor and soil mercury pools. *Environmental Science and Technology*, 46: 7963-7970.
- Kolka, R.K. 2012. Chapter 12. Effects of fire and fuels management on water quality in Eastern North America. In *Cumulative Watershed Effects of Fuel Management in the Eastern United States*. R. LaFayette, M.T. Brooks, J.P. Potyondy, L. Audin, S.L. Krieger, Suzanne and C.C Trettin (eds). Gen. Tech. Rep. SRS-161. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station, 327 p.
- Powers, M.D., R.K. Kolka, J.B. Bradford, B.J. Palik, S. Fraver, and M.F. Jurgensen. 2012. Carbon storage across a chronosequence of thinned and unmanaged red pine stands. *Ecological Applications*, 22(4): 1297-1307.
- Gabriel, M., R. Kolka, T. Wickman, L. Woodruff, and E. Nater. 2012. Latent effect of soil organic matter oxidation on mercury cycling within a southern Boreal ecosystem. *Journal of Environmental Quality*, 41:495-505.
- Palik, B., M. Martin, E. Zenner, C. Blinn, and R. Kolka. 2012. Overstory and regeneration dynamics in riparian management zones of northern Minnesota forested watersheds. *Forest Ecology and Management*, 271: 1-9.
- Kolka, R.K., A. Steber, K.N. Brooks, C.H. Perry, and M.D. Powers. 2012. Relationships between soil compaction following aspen harvests and harvest season, soil texture, and landscape position. *Northern Journal of Applied Forestry*, 29(1): 21-25.
- Guy, A.C., T.M. DeSutter, F.X.M. Casey, R. Kolka, and H. Hakk. 2012. Effects of major flooding on water and sediment characteristics in an urban environment. *Journal of Environmental Quality*, 41: 554-563.
- Risch, M.R., J.F. DeWild, D.P. Krabbenhoft, R.K. Kolka, and L. Zhang. 2012. Litterfall mercury deposition in the

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- Van Grinsven, M., T. Pypker, R. Kolka. 2012. Use of isotopic and hydrometric monitoring methods to partition hydrologic contributions to forested wetlands, Upper Peninsula of Michigan. American Geophysical Union Annual Conference, San Francisco, CA.
- Romanowicz, K.J., A.L. Daniels, L.R. Potvin, E.S. Kane, R.K. Kolka, R.A. Chimner, and E.A. Lilleskov. 2012. Incorporating peatland plant communities into the enzymic 'latch' hypothesis: Can vegetation influence carbon storage Mechanisms? American Geophysical Union Annual Conference, San Francisco, CA.
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- Wickman, T. and R. Kolka. 2012. Mercury dynamics and fire in the Boundary Waters Canoe Area Wilderness. Western Great Lakes Resource Management Conference. Ashland, WI.
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- Kolka, R. 2011. Watershed cycling of mercury. Faculty of Natural Resources Management Seminar. Lakehead University, Thunder Bay, Ontario, Canada.
- Eggert, S., J. Finlay, R. Kolka, E. Nater, and D. Bell. 2011. Potential global change effects on mercury accumulation in food webs of northern Minnesota seasonal ponds. Global Change Effects on Aquatic Ecosystems: A Symposium Inspired by Patrick J. Mulholland, Oak Ridge, TN.
- Helmets, M., X. Zhou, H. Asbjornsen, R. Kolka, and M. Tomer. 2011. Nitrogen losses in runoff from row-cropped watersheds: environmental benefits of native prairie filter strips. American Geophysical Union Annual Conference, San Francisco, CA.
- Fissore, C., E. Nater, B. Dalzell, R. Kolka, and C. Perry. 2011. From 20cm to 1.5m: is digging deeper necessary? American Geophysical Union Annual Conference, San Francisco, CA.
- Fissore, C., C. Giardina, C. Swanston, and R. Kolka. 2011. Lessons from our forests: use of radiocarbon to understand soil carbon stabilization and response to warming. American Geophysical Union Annual Conference, San Francisco, CA.
- Welsh, W., X. Zhou, M. Helmets, L. Schulte-Moore, T. Isenhardt, and R. Kolka. 2011. Evaluating root zone water quality impacts associated with various biomass production systems across landscape positions. American Geophysical Union Annual Conference, San Francisco, CA.
- DeSutter, T., A. Guy, F. Casey, R. Kolka, and J. Leitch. 2011. Sediment quantity and quality following the 2009 flooding event in Fargo-Moorhead. School of Natural Resource Sciences Seminar Series, North Dakota State University, Fargo, ND.
- Olson, D., T. Griffis, R. Kolka, and A. Noormets. 2011. Interannual variability in the carbon budget of a temperate peatland. Geological Society of America. Minneapolis, MN.
- Kolka, R.K., P.J. Hanson, R.J. Norby, B.P. Palik, S.D. Wulschleger, C.T. Garten, S.D. Sebestyen, P.E. Thornton, P.J. Mulholland, D.E. Todd, C. Iversen, and J. Warren. 2011. Evaluating spruce peatland responses under climatic and environmental change: SPRUCE experiment. Society of American Foresters. Honolulu, HA.
- Kolka, R., M. Powers, J. Bradford, B. Palik, and M. Jurgensen. 2011. Effects of red pine thinning and stand age on ecosystem carbon pools and fluxes. Society of American Foresters. Honolulu, HA.
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- Kolka, R. 2011. Lake States fire science consortium. National Indian Timber Symposium. Cloquet, MN.
- Sebestyen, S.D., M. Jacobson, J.B. Cotner, J.C. Finlay, and R.K. Kolka. 2011. Patterns of dissolved organic matter efflux from a northern peatland watershed and related landscape factors. Gordon Research Conference Catchment Science. Lewiston, ME.
- Sebestyen, S.D., P.J. Hanson, R.K. Kolka, R.J. Norby, B. Palik, S.D. Wulschleger, C.T. Garten, P.E. Thornton, N. Griffiths, P.J. Mulholland, D.E. Todd, C. Iversen, J. Warren, and L. Hook. 2011. An overview of the SPRUCE

- project, a large-scale study of increased temperature and carbon dioxide effects on a northern peatland. Gordon Research Conference Catchment Science. Lewiston, ME.
- Kolka, R. 2011. Watershed Cycling of Mercury: Lessons Learned from Research in Northern Minnesota. The Water Summit. Grand Rapids, MN.
- Thompson, J., T. Stewart, C. McMullen, K. Franz, R. Kolka, M. Gerken, J. Wu, Z. Keninger, and R. Manatt. 2011. Headwater streams in central Iowa: Measuring hydrological and biological responses to intensified rural and urban land use and climate change. Iowa Water Conference. Ames, IA.
- Smith, T., R. Cruse, M. Helmers, and R. Kolka. 2011. Dissolved organic carbon in runoff from replicated agricultural watersheds. Iowa Water Conference. Ames, IA.
- Palik, B., R. Kolka, and M. Hanson. 2011. Sustaining seasonal forest pond structure and function with riparian buffers: a management experiment. 16th Annual Wisconsin Wetlands Association's Conference. Baraboo, WI.
- Ontl, T., C. Cambardella, K. Hofmockel, L. Schulte, and R. Kolka. 2011. Soil aggregation and soil organic matter pool differences across landscape positions in an agroecosystem. Ecological Society of America Conference, Austin, TX.
- Kolka, R. 2011. Watershed Cycling of Mercury. Minnesota Association of Conservation Professionals. Brainerd, MN.
- Kolka, R. and T. Wickman. 2011. Influence of fire on mercury cycling. Webinar for the Lakes States Fire Sciences Consortium.
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- Engstrom, D., J. Coleman Wasik, E. Swain, B. Monson, C. Mitchell, J. Almendinger, S. Balogh, B. Branfireun, R. Kolka and J. Jeremiason. 2011. Changes in mercury methylation in a boreal wetland previously enriched in sulfate: synergistic effects of atmospheric deposition and water-level fluctuations. The 10th International Conference on Mercury as a Global Pollutant, Halifax, Canada.
- Kolka, R., S. Sebestyen, C. Mitchell, E. Nater, B. Branfireun, and P. Hanson. 2011. Mercury processes under elevated carbon dioxide and soil warming in a peatland: hypotheses for the SPRUCE experiment. The 10th International Conference on Mercury as a Global Pollutant, Halifax, Canada.
- Kolka, R., C. Mitchell, and S. Fraver. 2011. Influence of blowdown, fire and salvage logging on forest floor and soil mercury pools. The 10th International Conference on Mercury as a Global Pollutant, Halifax, Canada.
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- Hill, B.H., R.K. Kolka, and F.H. McCormick. 2011. Ecosystem services derived from headwater catchments. North American Benthological Society Meeting, Providence, RI.
- Guy, A., T. DeSutter, F. Casey, R. Kolka, and J. Leitch. 2011. Impacts of major flooding on an urban environment. Manitoba Soil Science Society Conference, Winnipeg, Canada.
- Eggert, S., R. Brooks, K. Nislow, R. Kolka, D. Ward, and C. Chen. 2011. Mercury accumulation in aquatic food webs of northern Minnesota seasonal ponds. 8th Annual Forestry, Wildlife and Natural Resource Research Review, Cloquet, MN.
- Sebestyen, S.D., M. Jacobson, K. Watson, J.B. Cotner, J.C. Finlay, and R.K. Kolka. 2011. Dissolved organic matter and biogeochemical hotspots in a northern peatland catchment. 8th Annual Forestry, Wildlife and Natural Resource Research Review, Cloquet, MN.
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- Carlson, B., J. Jeremiason, S. Sebestyen, and R. Kolka. 2011. Trace metal and dissolved organic matter cycling in an ombrotrophic bog. American Society of Limnology and Oceanography, San Juan, Puerto Rico.
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- Schulte Moore, L., E. Bach, C. Cambardella, S. Hargreaves, M. Helmers, K. Hofmockel, T. Isenhardt, R. Kolka, T. Ontl, W. Walsh, and R. Williams. 2010. Soil, water, and greenhouse-gas impacts of alternative biomass cropping systems. American Geophysical Union Annual Conference, San Francisco, CA.
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- Hernandez-Santana, V., X. Zhou, M.J. Helmers, H. Asbjornsen, and R. Kolka. 2010. Effectiveness of perennial vegetation strips in reducing runoff in annual crop production systems. American Geophysical Union Annual Conference, San Francisco, CA.
- Sebestyen, S.D., R.K. Kolka, M. Jacobson, M. Tsui, J.B. Cotner, J.C. Finlay, J. Jeremiason, C.P. Mitchell, and K. Fitzgerald. 2010. Dissolved organic matter (DOM) dynamics in terrestrial and aquatic ecosystems. American Geophysical Union Annual Conference, San Francisco, CA.
- Mitchell, C., M. Richardson, B. Branfireun, R. Kolka, and D. Fortin. 2010. LiDAR-derived spatial models of hydrological and biogeochemical source areas to improve estimates of terrestrial-aquatic mercury export in northern forested landscapes. American Geophysical Union Annual Conference, San Francisco, CA.
- Witt, E.L., C.D. Barton, J.W. Stringer, D.W. Bowker, and R.K. Kolka. 2010. Impact of streamside management zone width and canopy retention on hydrologic response following forest harvest in Appalachian headwater streams. American Water Resources Association Annual Conference, Philadelphia, PA.
- Kolka, R.K., A. Steber, K. Brooks, and C.H. Perry. 2010. Effects of harvest season, soil texture, and landscape position on soil compaction in northern Minnesota aspen harvests. Soil Science Society of America Conference, Long Beach, CA.
- Kolka, R.K., B.J. Palik, D.P. Tersteeg, and J.C. Bell. 2010. Effects of riparian buffers on the hydrology of seasonal ponds. Soil Science Society of America Conference, Long Beach, CA.
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- Eggert, S., R. Kolka, N. Brandt, L. Rutten, C. Huckins, and A. Marcarelli. 2010. The role of research in aquatic habitat protection and restoration on National Forests and protected areas in the Midwest. Midwest Fish and Wildlife Conference, Minneapolis, MN.
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- Asbjornsen, H., M. Helmers, X. Zhou, R. Kolka, M. Tomer, and R. Cruse. 2010. Strategic integration of perennial filter strips in rowcrop agriculture for enhancing water quality and flow regulation in Central Iowa. International Symposium on Soil Quality and the Management of World Mollisols. Harbin, China.
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- Witt, E.L., C.D. Barton, J.W. Stringer, D.W. Bowker, and R.K. Kolka. 2010. Evaluating Best Management Practices for ephemeral channel protection during forest harvest in the Cumberland Plateau-preliminary findings. Central Hardwoods Conference, Lexington, KY.

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- Shannon, J., J. Boedt, K. Brooks, S. Sebestyen, and R. Kolka. 2010. Sap-flux, interception, and changes in water yield in response to uplands aspen clearcutting and conversion to conifers. 7th Annual Minnesota Forest Research Review Symposium, Cloquet, MN.
- Schulte Moore, L., T. Gunther, R. Hall, A. Hallam, W. Headlee, E. Heaton, M. Helmers, K. Hofmockel, T. Isenhardt, R. Kolka, K. Moore, and T. Ontl. 2010. Agronomic, environmental, and economic performance of alternative biomass cropping systems. International Association for Landscape Ecology, Athens, GA.
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- Kolka, R., and S. Sebestyen. 2009. Controls on long-term increases in TOC concentrations and fluxes in peatland catchments in northern Minnesota, USA. BIOGEOMON Conference, Helsinki, Finland.
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- Olson, D. M., A. Noormets, R. Kolka, J. Chen, and T. Griffis. 2009. Using continuous flux measurements to track seasonal shifts in carbon balance in a northern MN peatland. Forest and Water Conference, Raleigh, NC.
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- Kolka, R.K. 2009. Watershed cycling of mercury. Brainerd Lakes Area Audubon Society, Brainerd, MN.
- Gabriel, M., R. Kolka, T. Wickman, E. Nater, and L. Woodruff. 2009. Potential impact of organic soil losses on yellow perch (*Perca flavescens*) total mercury concentrations in a boreal ecosystem. Society of Wetland Scientists Meeting, Madison, WI.
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- Bradford, J., P. Weishampel, M.L. Smith, R. Kolka, R.A. Birdsey, S.V. Ollinger, and M.G. Ryan. 2009. Detrital carbon pools in temperate forests: Magnitude and potential for landscape-scale assessment. North American Carbon Program Meeting, San Diego, CA.
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- Kolka, R.K. 2008. Mercury in Minnesota watersheds. Natural Resources Seminar Series, University of Minnesota Research and Outreach Center, Grand Rapids, MN.
- Kolka, R.K., and S.D. Sebestyen. 2008. Celebrating 50 years of research on the Marcell Experimental Forest. Society of American Foresters, Reno, NV.
- Kolka, R., E. Witt, E. Nater, and T. Wickman. 2008. Forest fire effects on mercury deposition in a Boreal forest. Society of American Foresters, Reno, NV.
- Sebestyen, S.D. and R.K. Kolka. 2008. Stream dissolved organic carbon export decreases in response to experimental sulfate additions to a peatland catchment. Northeastern States Research Cooperative Annual Conference, Durham, NH.
- Wickman, T., R. Kolka, K. Gebhart, and J. Butcher. 2008. Mercury monitoring across multiple media on the Superior National Forest. Great Lakes Mercury Workshop, La Crosse, WI.
- Sebestyen, S.D. and R.K. Kolka. 2008. Controls on dissolved organic carbon transport in forested headwater streams. Special Symposium on Nutrient Budgets in the Balance: What have we Learned? Soil Science Society of America Conference, Houston, TX.
- Kolka, R. and J. Bradford. 2008. A Forest Service perspective on climate change. 21st Native American Fish and Wildlife Society Great Lakes Regional Conference, Walker, MN.
- Richardson, M, C. Mitchell, B. Branfireun, and R. Kolka. 2008. Spatial patterns of peatland pore water chemistry and correlation with LIDAR derived geomorphic gradients: indicators of methylmercury hot spots in forested landscapes. American Geophysical Union Annual Conference, San Francisco, CA.
- Xiao, J., K. Davis, B. Cook, P. Bolstad, A. Desai, N. Saliendra, K. Cherrey, R. Kolka, and P. Weishampel. 2008. Upscaling of eddy flux measurements in the Upper Great Lakes Region using MODIS data and modeling approaches. American Geophysical Union Annual Conference, San Francisco, CA.
- Weishampel, P, J.Y. King, and R.K. Kolka. 2008. Interannual variability in the temperature-responsiveness of CO₂ flux from forest and peatland soils. American Geophysical Union Annual Conference, San Francisco, CA.
- Cook, B.D., A.R. Desai, P. Weishampel, J.Y. King, P.V. Bolstad, K.J. Davis, R.K. Kolka, N. Saliendra, R.M. Teclaw, and D.D. Baumann. 2008. Methane emission and warming potentials of wetlands in the Great Lakes Region. American Geophysical Union Annual Conference, San Francisco, CA.

- Sebestyen, S., S. Eggert, K. McGuire, S. Bailey, J. Campbell, and R. Kolka. 2008. A century of experimental forest and range research: recent synthesis efforts and opportunities for cross-site collaboration. Hubbard Brook Annual Meeting, Durham, N.H.
- Birdsey, R., M. Ryan, R. Kolka, S. McNulty, J. Hom, K. Clark, D. Hollinger, J. Bradford, C. Potter, S. Ollinger, S. Klooster, and Y. Pan. 2008. Integrating landscape-scale forest measurements with remote sensing and ecosystem models to improve carbon management decisions. NASA Carbon Cycle and Ecosystems Joint Workshop. Adelphi, MD.
- Kolka, R.K. 2008. Watershed cycling of mercury. Joint departmental seminar of Natural Resources Ecology and Management, and Geological and Atmospheric Sciences, Iowa State University.
- Davis, K.J., P.V. Bolstad, R. Anderson, B.D. Cook, F.A. Heinsch, S.W. Running, N.Z. Saliendra, K. Cherrey, A.R. Desai, R. Kolka, P. Weishampel. 2008. Probabilistic carbon flux upscaling in a complex northern forest ecoregion. NASA Carbon Cycle and Ecosystems Joint Workshop. Adelphi, MD.
- Kolka, R.K. 2008. Intensive harvesting effects on soil properties and plant responses. Swedish/US Bioenergy Collaboration, Madison, WI.
- Merten, E., N. Hemstad, R. Newman, B. Vondracek, L. Johnson, R. Kolka, S. Verry, and S. Eggert. 2008. Forest harvest effects on a northern Minnesota stream system: A study spanning 11 years. Ecological Society of America, Milwaukee, WI.
- Lilleskov, E.A., N.J. Karberg, C.W. Swanston, R.K. Kolka, and T.G. Pypker. 2008. Effects of invasive earthworms on soil carbon, soil respiration, and total belowground carbon flux in northern hardwood forests. Ecological Society of America, Milwaukee, WI.
- Wickman, T., E. Witt, R. Kolka, and E. Nater. 2008. Effects of forest type and fire on mercury deposition in the Boundary Waters Canoe Wilderness Area. International Lake of the Woods Water Quality Forum. International Falls, MN.
- Bradford, J., P. Weishampel, M.L. Smith, R. Kolka, and M. Ryan. 2008. Assessing forest carbon at landscape scales: obstacles and opportunities. IUFRO Landscape Ecology Conference. Chengdu, China.
- Kolka, R. K. 2007. Mercury cycling and the Marcell Experimental Forest. Minnesota Forest Resource Partnership, Marcell Experimental Forest, MN.
- Saliendra, N., M. Kubiske, R. Teclaw, R. Kolka, K. Davis, K. Cherrey, A. Desai, D. Ricciuto, P. Bolstad, B. Cook, R. Anderson, and F.A. Heinsch. 2007. Upscaling carbon fluxes from stand level towers to the footprint of a very tall tower in a heterogeneous landscape. American Geophysical Union Annual Conference, San Francisco, CA.
- Weishampel, P., J. King, and R. Kolka. 2007. Carbon distribution and net primary production in a forest-peatland landscape mosaic. American Geophysical Union Annual Conference, San Francisco, CA.
- Kolka, R.K. 2007. Contributions to small watershed science from the Marcell Experimental Forest. Symposium on Linking Aquatic Sciences and Management: Small Watershed Studies in North American Forested Landscapes, Congress of the International Association of Theoretical and Applied Limnology, Montreal, Canada.
- Maher, R., H. Asbjornsen, R. Kolka, C. Cambardella, J. Raich. 2007. Plant production and soil CO₂ flux across a chronosequence of tallgrass prairie reconstructions, Iowa, USA. Ecological Society of America, San Jose, CA.
- Kolka, R.K. 2007. Mercury cycling and land management impacts. USFS Air Program National Meeting. Grand Marais, MN.
- Kolka, R.K. 2007. USFS R&D Wilderness Review: Fire, Water and Air. Washington D.C.
- Maher, R.M., H.A. Asbjornsen, and R.K. Kolka. 2007. Soil respiration and belowground biomass production across a chronosequence of tall grass prairie reconstructions. 2nd Annual Graduate Program in Sustainable Agriculture Symposium, Iowa State University, Ames, IA.
- Mitchell, C.P.J., B.A. Branfireun, and R.K. Kolka. 2007. Biogeochemical hotspots: How do they apply to mercury cycling in peatlands? Canadian Meteorological and Oceanographic Society-Canadian Geophysical Union-American Meteorological Society Congress. St. John's, Newfoundland, Canada.
- Mitchell, C.P.J., A. Heyes, B.A. Branfireun, and R.K. Kolka. 2007. The effects of watershed forest clearing on mercury biogeochemistry in peatlands. 10th International Symposium on Wetland Biogeochemistry: Frontiers in Biogeochemistry. Annapolis, MD.
- Wickman, T., M. Gabriel, R. Kolka, J. Butcher, K. Gebhardt, L. Woodruff, W. Cannon, and E. Witt. 2007. Influence of prescribed fire on the re-mobilization of mercury in the Boundary Waters Canoe Area Wilderness - Update. 2007 International Lake of the Woods Water Quality Forum, International Falls, MN.
- Martin, M., E.K. Zenner, B. Palik, C. Blinn and R. Kolka. 2007. Understory plant and tree regeneration response to different harvesting approaches in riparian areas nine years after treatment. North American Forest Biology Workshop, Bloomington, IN.

- Perry, C.H., M.C. Amacher, W. Cannon, R.K. Kolka, and L. Woodruff. 2007. How does mercury vary in forest floor of the central United States? Forest Health Monitoring Meeting, San Diego, CA.
- Merten, E., R. Newman, B. Vondracek, N. Hemstad, L. Johnson, R. Kolka, and S. Verry. 2007. Forest harvest effects on a northern Minnesota stream system: nine years later. American Fisheries Society, San Francisco, CA.
- Helmets, M., H. Asbjornsen, R. Kolka, and M. Tomer. 2007. Water cycling under contrasting annual-perennial plant systems in agricultural landscapes in the Midwestern U.S. Eco Summit 2007, Beijing, China.
- Kolka, R.K. 2006. Peatlands and landscapes. Peat Forum, Thunder Bay, Ontario, Canada.
- Weishampel, P., J. King, and R. Kolka. 2006. Methane fluxes in forests and wetlands of northern Wisconsin and Minnesota. American Geophysical Union Annual Conference, San Francisco, CA.
- Kolka, R.K. 2006. Effect of forest harvesting BMPs on coarse woody debris distribution in stream and riparian zones in three Appalachian watersheds. Forest Guild Annual Meeting, Boulder Junction, WI.
- Kolka, R.K., D.M. Andrews, C.D. Barton and C.C. Rhoades. 2006. Vegetation establishment, hyporheic zone and soil development, in a restored stream/riparian area. International Conference on Forests and Waters in a Changing Environment. Beijing, China.
- Kolka, R.K. 2006. Northern Research Station Soil/Water/Air Research Program. Inner Mongolia Forestry Academy, Hohhot, China.
- Kolka, R. and D. Olson. 2006. Introduction to the Marcell eddy covariance system. USCCC Meeting, Beijing, China.
- Perry, C.H., M.C. Amacher, W. Cannon, R.K. Kolka, and L. Woodruff. 2006. The distribution of mercury in a forest floor transect. 8th Forest Inventory and Analysis Science Symposium, Monterey, CA.
- Bolstad, P.V., R. Anderson, B.D. Cook, J. Tang, N.Z. Saliendra, P. Weishampel, R.K. Kolka, J.G. Martin, and K.J. Davis. 2006. Landscape estimates of carbon pools and fluxes via LIDAR and high resolution spectral data. American Geophysical Union Annual Conference, San Francisco, CA.
- Saliendra, N.Z., M.E. Kubiske, R. Teclaw, R. Kolka, K. Davis, K. Cherrey, A. Desai, D. Ricciuto, B. Cook, F.A. Heinsch, and P. Bolstad. 2006. Testing the flux tower upscaling hypothesis in a complex landscape in northern Wisconsin. Annual AmeriFlux Meeting, Boulder, CO.
- Weishampel, P., J. King, and R. Kolka. 2006. Scaling soil CO₂ and CH₄ fluxes in heterogeneous northern forest landscapes. NASA Carbon Cycle and Ecosystems Joint Workshop on Biodiversity, Terrestrial Ecology and Related Applied Science. Adelphi, MD.
- Birdsey, R., M. Ryan, M.L. Smith, R. Kolka, S. McNulty, J. Hom, C. Potter, M. Lefsky, J. Bradford, and P. Weishampel. 2006. Linking landscape-scale carbon monitoring with forest management. NASA Carbon Cycle and Ecosystems Joint Workshop on Biodiversity, Terrestrial Ecology and Related Applied Science. Adelphi, MD.
- Andrews, D.M., C.D. Barton, R.K. Kolka, and C.C. Rhoades. 2006. Hyporheic zone development and water quality improvement in a restored riparian area. Annual Conference of the Geological Society of America, Philadelphia, PA.
- Kolka, R.K. and P. Weishampel. 2006. Tier 3 measurements in the upscaling approach at the Chequamegon Ecosystem-Atmosphere Study (ChEAS). Annual ChEAS Meeting. Woodruff, WI.
- Perry, C.H., M.C. Amacher, W. Cannon, R.K. Kolka, and L. Woodruff. 2006. The distribution of mercury in a forest floor transect. Soil Science Society of America Conference, Indianapolis, IN.
- Barton, C.D., D.M. Andrews, and R.K. Kolka. 2006. Influence of soil physiochemical properties on hydrology and restoration response in Carolina bay wetlands. International Conference on Hydrology and Management of Forest Watersheds, New Bern, NC.
- Tersteeg, D., B. Palik, R. Kolka, and J. Bell. 2006. Testing the efficacy of riparian buffers for protecting seasonal wetlands. International Conference on Hydrology and Management of Forest Watersheds, New Bern, NC.
- Wickman, T., M. Gabriel, and R. Kolka. 2006. Influence of prescribed fire on the re-mobilization of mercury in the Boundary Waters Canoe Area Wilderness. 2006 International Lake of the Woods Water Quality Forum, International Falls, MN.
- Mitchell, C.P.J., B.A. Branfireun, A. Heyes, and R.K. Kolka. 2006. Hotspots of mercury methylation in northern peatlands: Spatial and seasonal variability. Canadian Geophysical Union, Banff, AL, Canada.
- Mitchell, C.P.J., B.A. Branfireun, and R.K. Kolka. 2006. Fluxes of mercury and methylmercury during snowmelt in two peatland-dominated landscapes, Minnesota, USA. Canadian Geophysical Union, Banff, AL, Canada.

- Kastendick, D.N., E.K. Zenner, B.P. Palik, and R.K. Kolka. 2006. Riparian forest management in Northern Minnesota: Residual overstory effects on understory vegetation and nutrient availability. Minnesota Chapter of the Society of American Foresters, Brainerd, MN.
- Witt, E., E. Nater and R. Kolka. 2006. Influence of fire on total and methyl mercury deposition in boreal landscapes. Mercury as a Global Pollutant Conference, Madison, WI.
- Gabriel, M., T. Wickman, R. Kolka, E. Nater, J. Butcher, K. Gebhardt. 2006. Influence of prescribed forest fire on the re-mobilization of mercury in the Boundary Waters Canoe Area Wilderness. Mercury as a Global Pollutant Conference, Madison, WI.
- Coleman, J., D. Engstrom, E. Swain, B. Monson, R. Kolka, C. Mitchell, B. Branfireun, and J. Jeremiason. 2006. Is there chronic enhancement of mercury methylation from prolonged sulfate addition to an experimental wetland. Mercury as a Global Pollutant Conference, Madison, WI.
- Mitchell, C.P.J, B.A. Branfireun, A. Heyes, and R.K. Kolka. 2006. Hotspots of mercury methylation in northern peatlands: Spatial and seasonal variability. Mercury as a Global Pollutant Conference, Madison, WI.
- Mitchell, C.P.J, B.A. Branfireun, R.K. Kolka, S. Wanigaratne, and G. Bunker. 2006. Assessing sulfate and carbon controls on mercury methylation in northern peatlands: An insitu mesocosm approach. Mercury as a Global Pollutant Conference, Madison, WI.
- Perry, C.H., M.C. Amacher, W.F. Cannon, R.K. Kolka, and L.G. Woodruff. 2006. The distribution of mercury in a forest floor transect. USDA Forest Service Forest Health Monitoring Meeting, Charleston, SC.
- Sumner, J.P., M.J. Vepraskas, and R.K. Kolka. 2006. Methods of rainfall evaluation for determining wetland hydrology. Soil Science Society of North Carolina Annual Meeting. Raleigh, NC.
- Cherry, A., C. Barton, J. Stringer, and R. Kolka. 2005. Effects of federal environmental protection acts on "pristine" streams in Eastern Kentucky. Soil and Water Conservation Society. Keystone, CO.
- Asbjornsen, H., M. Helmers, M. Liebman, L. Schulte, R. Kolka, M. Tomer, C. Cambardella, K. Schilling, R. Cruse, J. Opsomer, P. Drobney, M. Nosschi. 2005. Restoring eco-hydrological functioning of agricultural systems in the Midwestern U.S. through strategic integration of perennial plants in Iowa, USA. XXII International Union of Forest Research Organizations (IUFRO) World Congress. Brisbane, Australia.
- Asbjornsen, H., M. Helmers, M. Liebman, L. Schulte, R. Kolka, M. Tomer, C. Cambardella, K. Schilling, R. Cruse, J. Opsomer, P. Drobney, M. Nosschi. 2005. Ecosystem function and biodiversity in watersheds with contrasting annual-perennial plant community configurations. 9th North American Agroforestry Conference. Rochester, MN.
- Asbjornsen, H., M. Helmers, M. Liebman, L. Schulte, R. Kolka, M. Tomer, C. Cambardella, K. Schilling, J. Opsomer, M. Nosschi. 2005. Water, nutrient and carbon cycling in watersheds with contrasting annual-perennial plant community configurations. Agriculture and the Environment Conference. Iowa State University, Ames, IA.
- Tersteeg, D., J. Bell, R. Kolka, B. Palik. 2005. Influences of riparian buffers and soil variability on the hydrology of seasonal wetlands in Northern Minnesota. Soil Science Society of America Conference. Salt Lake City, UT.
- Andrews, D.M., C.D. Barton, R.K. Kolka, and C.C. Rhoades. 2005. Hyporheic zone development in a restored riparian area. Soil Science Society of America Conference. Salt Lake City, UT.
- Kolka, R., R. Tarpey, M. Jurgensen, and B. Palik. 2005. Long-term effects of red pine basal area retention on ecosystem carbon storage. Society of American Foresters, Fort Worth, TX.
- Kolka, R.K. 2005. Research on the Marcell Experimental Forest. Society of American Foresters, Fort Worth, TX.
- Kastendick, D.N., B.P. Palik, R.K. Kolka, and E.K. Zenner. 2005. Riparian forest management in Northern Minnesota: Effects of replicated riparian silvicultural treatments on forest biomass, structure, composition, and indices of plant available nutrients. Society of American Foresters, Fort Worth, TX.
- McClure, J., R. Kolka and D. Grigal. 2005. Coarse woody debris pools in an upland/peatland landscape. North American Forest Biology Workshop, Houghton, MI.
- Wickman, T., J. Butcher, and R. Kolka. 2005. Influence of prescribed fire on fish and stream water mercury concentrations. 2005 International Lake of the Woods Water Quality Forum, International Falls, MN.
- Steber, A., K. Brooks, R. Kolka, and C. Perry. 2005. Surface compaction evaluation and soil sensitivity in aspen stands of the Great Lakes States. USDA Forest Service Forest Health Monitoring Meeting, Miami, FL.
- Cherry, A., C. Barton, J. Stringer, and R. Kolka. 2005. Evaluating the effectiveness of streamside management zones in forested head water streams of Appalachia: Calibration phase. Soil and Water Conservation Society. Rochester, NY.
- Butcher, J., T. Wickman, and R. Kolka. 2005. Prescribed fire influences on mercury pathways in the Boundary Waters Canoe Area Wilderness, Minnesota. Western Great Lakes Research Conference, Marquette, MI.
- Giese, L.A. W. M. Aust, R. K. Kolka and C. C. Trettin. 2004. Riparian forest litter dynamics. American Water Resources Association Specialty Riparian Conference. Olympic Valley, CA.

- Wickman, T., R. Kolka, and J. Butcher. 2004. Effects of prescribed fire on mercury concentrations in water and fish in the Larch Lake watershed. Advancing the Fundamental Sciences Conference. San Diego, CA.
- Kolka, R., R. Tarpey, M. Jurgensen, and B. Palik. 2004. Influence of the intensity of silviculture on soil carbon. Advancing the Fundamental Sciences Conference. San Diego, CA.
- Kolka, R., R. Tarpey, M. Jurgensen, and B. Palik. 2004. Influence of the intensity of silviculture on soil carbon. Soil Science Society of America Conference. Seattle, WA.
- Almendinger, J., D. Engstrom, J. Jeremiason, R. Kolka, E. Nater, B. Monson and E. Swain. 2004. Enhanced methylmercury export from an experimental wetland following sulfate addition. Fourth Environmental Toxicology and Chemistry World Congress, Portland, OR.
- Kolka, R.K. 2004. Interdisciplinary approaches to research. University of Nebraska, School of Natural Resources Seminar Series, Lincoln, Nebraska.
- Kolka, R.K. 2004. Understanding watershed disturbance. Forest Watershed and Riparian Disturbance Project Annual Workshop, Whitecourt, Alberta, Canada.
- Kolka, R., R. Birdsey and P. Dunn. 2004. Intensive site monitoring and the experimental forest carbon initiative. Annual Forest Health Monitoring Meeting, Sedona, AZ.
- Kolka, R.K. and J.R. Svec. 2003. Streamflow duration prediction: application to Forestry BMPs. Soil Science Society of America Conference. Denver, CO.
- Kolka, R.K. and E.S. Verry. 2003. The importance of wetlands to streamflow generation and peak flows. Izaak Walton League American Wetlands Conference. Minneapolis, MN.
- Verry, E.S. and R.K. Kolka. 2003. Importance of wetlands to streamflow generation. The First Interagency Conference on Research in the Watersheds. Benson, AR.
- Anderson, E.S., J.A. Thompson, D.A. Crouse and R.K. Kolka. 2003. Spatial patterns of soil carbon in forest soils of the Lower Coastal Plain of North Carolina. Soil Science Society of North Carolina Annual Meeting. Raleigh, NC.
- Kolka, R., R. Birdsey and P. Dunn. 2003. Experimental forest carbon initiative. Annual Forest Health Monitoring Meeting, Monterey, CA.
- Kolka, R.K., C.D. Barton, C.C. Trettin and E.A. Nelson. 2002. Framework for restored forested wetlands. Nanjing International Wetlands Symposium. Nanjing, China.
- Kolka, R.K., J.A. Thompson, A.C. Abnee and E.S. Anderson. 2002. Soil-landscape modeling of carbon storage and soil respiration rates: scaling point data to the landscape scale. Soil Science Society of America Conference. Indianapolis, IN.
- Jackson, C.R. and R.K. Kolka. 2002. Forestry best management practices and their effectiveness. Water Environment Federation Conference on National TMDL Science and Policy. Phoenix, AZ.
- Sun, G., S. McNulty, D. Amatya, Y. Liang, J. Lu, and R. Kolka. 2002. Modeling annual forest water yield and evapotranspiration across the southern US. Second Federal Interagency Hydrologic Modeling Conference. Las Vegas, NV.
- Byrd, E.J., R.K. Kolka, R.W. Warner and J.M. Ringe. 2002. Soil percolation and erosion on mine land soils. American Society for Surface Mining and Reclamation. Lexington, KY.
- Rhoades, C.C. and R.K. Kolka. 2002. Carbon sequestration on surface mine lands. American Society for Surface Mining and Reclamation. Lexington, KY.
- Kolka, R.K., Svec, J.R. and Stringer, J.W. 2002. Defining perennial, intermittent and ephemeral channels in eastern Kentucky; application to forestry best management practices. Forestry Best Management Practices Symposium. Atlanta, GA.
- McClure, J.D., A. White and R.K. Kolka. 2002. Effect of riparian zone BMPs on coarse woody debris in Appalachian watersheds. Forestry Best Management Practices Symposium. Atlanta, GA.
- Shouse, S., J. Stringer, M. Smidt, M. Pelkki, J. Ringe and R. Kolka. 2002. BMP costs associated with erosion control measures for skid trails. Forestry Best Management Practices Symposium. Atlanta, GA.
- Svec, J.R., R.K. Kolka, and J.W. Stringer. 2002. Defining perennial, intermittent and ephemeral channels in eastern Kentucky; application to forestry best management practices. 13th Central Hardwood Conference. Urbana-Champaign, IL.
- Kolka, R.K. and M.F. Smidt. 2002. Effects of forest road amelioration on soil bulk density, surface runoff, sediment transport, soil moisture and tree productivity. Kentucky Water Resources Annual Symposium. Lexington, KY.
- Svec, J.R., R.K. Kolka, and J.W. Stringer. 2002. Stream classification: Perennial, Intermittent, and Ephemeral Channels in eastern Kentucky and implications for streamside management zones. Kentucky Water Resources Annual Symposium. Lexington, KY.

- Giese, L.A. W. M. Aust, C. C. Trettin, and R. K. Kolka. 2001. Successional patterns influence riparian forest carbon pools. Southern Forest Science Conference. Atlanta, GA.
- Kolka, R.K., E.P. Sharp, and J.R. Svec. 2001. Long-term stream water quality trends in the Cumberland Plateau physiographic region. Soil Science Society of America Conference, Charlotte, NC.
- Abnee, A.C., J.A. Thompson, R.K. Kolka, M.S. Coyne, and E.M. D'Angelo. 2001. Soil Respiration Dynamics in Forested Landscapes of Eastern Kentucky. Soil Science Society of America Conference, Charlotte, NC.
- Thompson, J.A., R.K. Kolka, A.C. Abnee and E.M. D'Angelo. 2001. Modeling soil carbon storage and dynamics from a landscape perspective in forested watersheds. Soil Science Society of America Conference, Charlotte, NC.
- Rhoades, C.C., R.K. Kolka and A. Dattilo. 2001. Recovery of soil processes and vegetation on recontoured logging roads in the Cumberland Mountains. Soil Science Society of America Conference, Charlotte, NC.
- Stevenson, K.P., R.K. Kolka, and M.S. Coyne. 2001. Suspended solids and the potential for eutrophication from three stream sources in a mixed-use watershed. Soil Science Society of America Conference, Charlotte, NC.
- Shouse, S., J. Stringer, M. Schmidt, M. Pelkki, and R. Kolka. 2001. Machine and labor times required to implement Kentucky's skid trail erosion control and revegetation BMPs. Council on Forest Engineering Conference. Snowshoe, WV.
- Smidt, M.F. and R.K. Kolka. 2001. Alternative skid trail retirement options in steep terrain. Council on Forest Engineering Conference. Snowshoe, WV.
- Coulter, C.B., J.A. Thompson and R.K. Kolka. 2001. Water quality implications of urban development in mixed-use watersheds. American Water Resources Association Conference, San Antonio, TX.
- Kolka, R.K., M.J. Lacki, M.H. Pelkki, and A.J. Worms. 2000. Challenges associated with a multidisciplinary field based senior capstone course in the forestry curriculum. Second Annual Teaching Symposium. University of Kentucky.
- Kolka, R.K. and M.F. Smidt. 2000. Soil moisture and runoff characteristics of two forest road restoration techniques. Soil Science Society of America Conference, Minneapolis, MN.
- Sandefur, B.C., A.D. Karathanasis, and R.K. Kolka. 2000. Geochemistry and hydrology of three southern Appalachian mountain mires. Soil Science Society of America Conference, Minneapolis, MN.
- Thompson, J.A. and R.K. Kolka. 2000. Soil carbon storage estimation in central hardwood forest watersheds using quantitative soil-landscape modeling. Soil Science Society of America Conference, Minneapolis, MN.
- Abnee, A.C., J.A. Thompson and R.K. Kolka. 2000. Carbon mineralization in forest soils of southeastern Kentucky: Landscape and seasonal dynamics. Soil Science Society of America Conference, Minneapolis, MN.
- Smidt, M.F., and R.K. Kolka. 2000. Forest road restoration. Kentucky Forest Industries Association Annual Meeting. Lexington, KY.
- Smidt, M.F., and R.K. Kolka. 2000. Forest road restoration. Kentucky Woodland Owners Association, Annual Meeting. Lexington, KY.
- Kolka, R.K. 2000. Assessment framework for wetland restoration. Invited talk: Ecological Restoration Symposium and Seminar. University of Kentucky.
- Smidt, M and Kolka, R. 2000. Application of the Tilth Self-drafting Subsoiler in Kentucky. Kentucky-Tennessee Regional Meeting, Society of American Foresters, Mammoth Cave, KY.
- Nelson, E.A., R.K. Kolka, and C.C. Trettin. 2000. Evaluating restoration success of a severely impacted wetland system – the Pen Branch project. Society of Wetland Scientists Conference, Quebec, Canada.
- Kolka, R.K., E.A. Nelson, and C.C. Trettin. 1999. Assessment framework for bottomland hardwood restoration. Soil Science Society of America Conference, Salt Lake City, UT.
- Barton, C.D., J.H. Singer, C.C. Trettin, and R.K. Kolka. 1999. Dissolved organic carbon distribution in a restored bottomland hardwood wetland. Soil Science Society of America Conference, Salt Lake City, UT.
- Singer, J.H., C.D. Barton, C.C. Trettin, R.K. Kolka, and R.R. Sharitz. 1999. Techniques for the restoration of isolated depression wetlands in South Carolina. Soil Science Society of America Conference, Salt Lake City, UT.
- Giese, L.A., W. M. Aust, C.C. Trettin, and R.K. Kolka. 1999. Comparison of carbon pools in early successional and late successional riparian forests. Soil Science Society of America Conference, Salt Lake City, UT.
- Giese, L.A., W. M. Aust, C.C. Trettin, and R.K. Kolka. 1999. Litter decomposition within disturbed Coastal Plain riparian forests. 10th Biennial Silviculture Conference, New Orleans, LA.
- Kolka, R.K. 1999. Hydrologic cycling of mercury and organic carbon in forested watersheds. Department of Plant and Soil Science Spring Seminar, University of Kentucky.
- Thompson, J. A., R. K. Kolka, J. M. Kabrick, and S. J. Indorante. 1999. Carbon storage estimation in forested watersheds using quantitative soil-landscape modeling. Soil Modeling Symposium, Minneapolis, MN.

- Kolka, R.K. 1998. Wetland restoration and the use of reference sites. Workshop on Selecting and Using Wetlands Reference Sites, Institute of Ecosystem Studies, Millbrook, NY.
- Kolka, R.K., C.C. Trettin, E.A. Nelson, and W. H. Conner. 1998. Tree seedling survival across a hydrologic gradient in a bottomland hardwood restoration. Annual Conference on Ecosystem Restoration and Creation, Tampa, FL.
- Kolka, R.K., C.C. Trettin, and E.A. Nelson. 1998. Development of an assessment framework for restored forested wetlands. Invited Presentation to the Special Symposium on the Use of Natural Resource Information in Wetland Creation and Restoration. Soil Science Society of America Conference, Baltimore, MD.
- Giese, L.A., W.M. Aust, R.K. Kolka, and C.C. Trettin. 1998. Carbon storage in Southeastern Coastal Plain riparian forests at varying successional stages. Soil Science Society of America Conference, Baltimore, MD.
- Kolka, R.K., E.A. Nelson, and C.C. Trettin. 1998. Interdisciplinary assessment of wetland restoration in a highly degraded system. NOAA Conference on Goal Setting and Success Criteria for Habitat Restoration. Charleston, SC.
- Nelson, E.A., R.K. Kolka, and C.C. Trettin. 1998. Interdisciplinary assessment framework for forested wetland restoration. Society of Wetland Scientist Conference. Anchorage, AK.
- Kolka, R. K., S. O'Ney, M. Baily, C. Trettin, M. Burke, H. Li, W. Harms, and J. Kilgo. 1998. Riparian forest management of the Southeastern Coastal Plain. Riparian Management in Forests of the Continental Eastern U.S. Conference, Columbus, OH.
- Wein, G.R., R.R. Sharitz, J.V. McArthur, K.W. McLeod, R.K. Kolka, E.A. Nelson. 1997. Ecological restoration of wetlands in the Southeastern Coastal Plain. SERDP Conference, Washington DC.
- Kolka, R.K., W.P. Casey, C.C. Trettin, and E.A. Nelson. 1997. Vegetation monitoring of a bottomland restoration in South Carolina. International Conference of the Society of Ecological Restoration. Fort Lauderdale, FL.
- Kolka, R.K., C.C. Trettin, and E.A. Nelson. 1997. Development of an assessment framework for forested wetland restoration. Annual Conference on Ecosystem Restoration and Creation, Tampa, FL.
- Kolka, R.K., J. Fleck, E.A. Nater, and D.F. Grigal. 1997. Inputs of mercury and dissolved organic carbon into a forested watershed. International Conference on the Biogeochemistry of Trace Elements, Berkeley, CA.
- Kolka, R.K., E.A. Nater, and D.F. Grigal. 1996. Hydrologic flux of mercury in a forested landscape. Soil Science Society of America Conference, Indianapolis, IN.
- Kolka, R.K. 1996. Hydrologic transport of mercury through forested watersheds. Savannah River Ecology Lab Special Seminar Series, Savannah River Site, SC.
- Verry, E.S., R.K. Kolka, E.A. Nater and D.F. Grigal. 1996. Hydrologic transport of total Hg through a forested upland/peatland watershed. NADP Technical Committee Meeting, Williamsburg, VA.
- Kolka, R.K., E.A. Nater, and D.F. Grigal. 1995. Hydrologic flux of mercury, dissolved organic carbon, and other ions in surface runoff from an upland forested catchment in Northern Minnesota. Soil Science Society of America Conference, St. Louis, MO.
- Kolka, R.K., D.F. Grigal, and E.A. Nater. 1995. Seasonal patterns, and relationships of Hg, DOC and other ions for a bog stream in Northern Minnesota. Mercury Pollution in the Midwestern United States, Minneapolis, MN.
- Leary, R., K. Nimerfro, M. Holdaway, R. Kolka, T. Burk, and A. Wolf. 1995. An integro-differential equation model of quaking aspen height growth with parameters governed by forcing functions based on heat, evapotranspiration, and forest floor. Midwest Forest Mensurationist Conference, Traverse City, MI.
- Kolka, R.K., D.F. Grigal, and E.A. Nater. 1994. Modeling Fluxes of DOC and Hg in Northern Upland/Bog Systems. International Symposium on the Ecology and Management of Northern Forested Wetlands, Traverse City, MI.
- Kolka, R.K., D.F. Grigal, E.A. Nater, and R. Bouabid. 1992. Comparison of weathering rates predicted by the PROFILE model and a micromorphological weathering index. Soil Science Society of America Conference, Minneapolis, MN.
- Kolka, R.K., D.A. Laird and E.A. Nater. 1991. Comparison of three mass balance mathematical techniques for quantitative clay mineralogy. Soil Science Society of America, Denver, CO.

OTHER CONFERENCES ATTENDED, ACADEMIC TRAVEL AND TRAINING

Other conferences attended and professional training include:

- 2010 Establishing a watershed study on Pioneer Farm, UW Platteville, Platteville, WI.
- 2007 Climate Change Media Relations Training, Denver, CO.
- 2006-2009 Chequamegon Ecosystem - Atmosphere Study, Woodruff, WI
- 2006 FORWARD Workshop, Thunder Bay, ON, Canada.
- 2004-2008 Northern Research Station Representative for NEON, various locations.
- 2005 EPA Workshop on Nutrients in the Upper Mississippi River Basin, St. Louis, MO.
- 2000-2001 Kentucky Water Resources Annual Symposium, Lexington, KY
- 2000 Coweeta Scientist Meeting, Athens, GA.

- 1999-2000 Kentucky-Tennessee Society of American Foresters Meeting, Jackson, TN, Mammoth Cave, KY.
 1999 Supervisor Training, University of Kentucky, Lexington, KY
 1999 Central Hardwoods Conference, Lexington, KY.
 1998 Workshop on Using Wetland Reference Sites, Institute of Ecosystem Studies, Millbrook, NY.
 1998 Riparian Management in Forests of the Continental Eastern U.S. Conference, Columbus, OH.
 1997-1998 Annual Conference on Ecosystem Restoration and Creation, Tampa, FL.
 1997-1998 Supervisory Training and Civil Rights Training, USDA Graduate School, Atlanta, GA.
 1997 International Conference on the Biogeochemistry of Trace Elements, Berkeley, CA.
 1996 WEPP Workshop (Water Erosion Prediction Program) for Southern Forests, Auburn, AL.
 1994 Week visitation to the Experimental Lakes Area Hg research facility, Ontario, Canada.
 1994 Mercury as a Global Pollutant Conference, Whistler, B.C., Canada.
 1994 Ecosystem Management Strategies for the Lake Superior Region, Duluth, MN.
 1992-1994 Great Lakes Forest and Soils Conference, Ashland, WI, Sault Ste. Marie, Ontario, Bemidji, MN.

SUCCESSFUL PROPOSALS (PI OR COPI)

- Spruce-Peatland Responses Under Climatic and Environmental Change (the SPRUCE experiment). 2009-2019.
 DOE/Oak Ridge National Lab. \$4,000,000-\$6,000,000K/year for 10 years (~\$50,000,000)
- Understanding soil organic matter change: modeling root and soil interactions across agricultural landscapes. 2012.
 Leopold Center for Sustainable Agriculture. \$69,452.
- PEATcosm: Understanding the interactions of climate, plant functional groups and carbon cycling in peatland ecosystems. 2011. National Science Foundation. \$705,636.
- Fire Severity and Ecosystem Impacts Immediately Following an Extreme Fire Event in Northern Minnesota. 2011.
 National Science Foundation. \$199,999.
- How Silvicultural Treatments Affect Carbon Storage in a Northern Conifer Forest: A 60-Year Perspective. 2011.
 Northeastern States Research Cooperative. \$55,041.
- Development of Best Management Practices For Mercury Contamination Following Fire: Implications for Ecosystem Restoration. 2011-2012. EPA - Great Lakes Restoration Initiative. \$139,800.
- Future of Black Ash Wetlands in the Northern Great Lakes Region. 2011-2012. EPA - Great Lakes Restoration Initiative. \$451,000.
- Getting the Most out of Iowa Forests: Linking Forest Understory Composition to Stream Water Quality and Enhancing Nutrient Capture in Forest Remnants in Agricultural Landscapes. 2011. Leopold Center for Sustainable Agriculture. \$93,745.
- Impacts of Forest Biomass Harvesting on the Mobility and Bioaccumulation of Mercury in the Western Great Lakes Region. 2010. Great Lakes Air Deposition Program. \$123,800.
- Evaluation of Biomass Harvesting Impacts on Minnesota's Forests. 2010. Legislative-Citizen Commission on Minnesota Resources. \$350,000.
- Fire-science Network and Delivery System for Fire-dependent Ecosystems of the Northern Lake States. 2010. Joint Fire Sciences Program. \$397,827.
- Transitioning to ecologically functional production systems. 2010. Leopold Center for Sustainable Agriculture. \$116,131.
- Learning and Teaching with Experimental Watersheds: Evaluation of Ecosystem Services in Mixed Annual-Perennial Agroecosystems. 2009. AFRI Managed Ecosystems. \$499,833.
- Influence of Alternative Biomass Cropping Systems on Short-Term Ecosystem Processes. 2009. AFRI Managed Ecosystems. \$499,250.
- Assessing the Environmental Sustainability and Capacity of Forest-Based Biofuel Feedstocks within the Lake States Region. 2009. DOE Biomass Research and Development Initiative Program. \$2,715,000.
- Biocomplexity of Hydrological Service Payments and Watershed Sustainability in Mexico. 2009. National Science Foundation Planning Grant. \$38,500.
- Carbon Cycle Research, Coordination, and Outreach through the National Soil Carbon Network. 2009. Agriculture and Food Research Initiative (AFRI), Cooperative State Research, Education, and Extension Service (CSREES) REE-NET Grants. \$200,000.
- Linking Water Availability with Forest Productivity. 2009. Forest Service Climate Change Initiative. \$125,000.
- Using the Houghton Mesocosm Facility for Climate Change Research: Parameterizing Models of Feedbacks Between Peatlands and Climate Change. 2009. Forest Service Climate Change Initiative. \$80,000.
- Implement the National Soil Carbon Network. 2009. Forest Service Climate Change Initiative. \$80,000.
- NRS Flux Tower and Climate Research Network. 2009. Forest Service Climate Change Initiative. \$30,000.

- Marcell Experimental Forest 50th Anniversary Symposium. 2009. Blandin Foundation. \$10,000.
- Marcell Experimental Forest 50th Anniversary Symposium. 2009. Itasca County, Minnesota. \$5,000.
- Mixing Reconstructed Prairie with Cropland to Balance Food and Biofuel Production with Environmental Quality. 2009. Sustainable Agriculture Research and Education (USDA Cooperative State Research, Education and Extension Service). \$175,000.
- Integration of Water, Nutrient and Carbon Cycling Under Diverse Annual-Perennial Plant Community Systems in Agricultural Landscapes. 2008. Leopold Center for Sustainable Agriculture. \$267,000.
- Effects of Red Pine Thinning and Stand Age on Ecosystem Carbon Pools and Fluxes. 2008. Forest Service Agenda 2020. \$145,000.
- Impacts of Woody Biomass Harvesting on Saprophytic Communities, Nutrient Availability, and Productivity in Aspen Ecosystems. 2008. Minnesota Forest Resources Council. \$296,000.
- Effect of Invasive Earthworms on the Hydrology of Northern Hardwood Forests in Michigan's Upper Peninsula. 2008. Huron Mountain Wildlife Foundation. \$3,100.
- Effect of fire on mercury cycling and fish accumulation in the Boundary Water Canoe Wilderness Area, Minnesota. 2007. Forest Service National Fire Plan. \$45,000/year for 5 years.
- Integrating Landscape-Scale Carbon Measurements with Remote Sensing and Ecosystem Models to Improve Carbon Management Decisions. 2007. NASA Carbon Cycle Science Program. \$876,000.
- Forest Service R&D for the Development of an Experimental Forest and Range Network. 2007. \$72,000.
- Effects of Sulfate Deposition on Methyl Mercury Production in Peatlands. 2007. Great Lakes Air Deposition Program. \$111,000.
- Evaluating Riparian Timber Harvest Guidelines: Phase III. 2007. Legislative-Citizen Commission on Minnesota Resources. \$400,000.
- Hyporheic Flux of a Northern Old Growth Riparian Area: Solute Injection During Snowmelt. 2007. Huron Mountain Club. \$4,100.
- Minnesota Riparian Management Study: Comparison of Effects on Stream Habitat and Fish Nine Years after Harvest Treatments. 2006. NCASI. \$20,000.
- Evaluating Riparian Timber Harvest Guidelines: Phase II. 2006. Legislative Commission on Minnesota Resources. \$333,000.
- Assessing indicator sensitivity for monitoring the effects of woody encroachment and restoration on forest health in oak savannas and woodlands in Central Iowa. 2006. USDA Forest Service Forest Health Monitoring Grants, \$80,000.
- The Distribution of Mercury in a Forest Floor Transect. 2005. USDA Forest Service Forest Health Monitoring Grants, \$65,000.
- Integration of Water, Nutrient and Carbon Cycling Under Diverse Annual-Perennial Plant Community Systems in Agricultural Landscapes. 2005. Leopold Center. \$125,000.
- Biocomplexity of Integrated Perennial-Annual Agroecosystems. 2005. National Science Foundation Biocomplexity Program. \$100,000.
- Minnesota Riparian Management Study: Ninth Year Comparison of Harvest Treatment Effects on Forest Regeneration, and Songbird Habitat. 2005. NCASI. \$45,000.
- Testing the Flux Tower Upscaling Hypothesis at a Regional Scale in a Complex Landscape. 2004. NASA Carbon Cycle Science Program. \$891,000.
- Linking Landscape-scale Carbon Monitoring with Forest Management. 2004. NASA Carbon Cycle Science Program. \$1,074,700.
- Measurement of Mercury Mobilization and Accumulation in Fish in Response to Prescribed Fire in a Boreal Forest Ecosystem. 2004. Joint Fire Sciences Program. \$423,000.
- Enhanced Rates of Mercury Methylation from Sulfate Deposition: A Whole Wetland Experiment. 2004. Great Lakes Air Deposition Program. \$225,000.
- Understanding Carbon Pools and Processes in Peatland Watersheds. 2004. Global Climate Change Program. \$200,000.
- Testing the Efficacy of Riparian Buffers for Protecting Seasonal Wetlands. 2003. USDA Forest Service Integrated Programs. \$52,500.
- Soil Compaction Effects on Site Productivity and Organic Matter Storage in Aspen Stands of the Great Lakes States. 2003. USDA Forest Service Forest Health Monitoring Grants. \$114,000.
- Linking Fiber Production and Soil Productivity to Intensity of Silviculture. 2003. Agenda 2020. \$123,500.
- Riparian Zone Silviculture Experiment. 2002. USDA Forest Service. \$57,000.

- Carbon Sequestration on Surface Mine Lands. 2002. US Department of Energy National Energy Technology Laboratory. \$1,479,805.
- Effect of Riparian Zone Width and Disturbance on Water Quality and Stream Communities Following Forest Harvest in Eastern Kentucky Watersheds. 2001. Kentucky State Budget 271 Funds. \$215,000.
- Retirement and Restoration of Forest Roads in Steep Terrain: Influence on Nonpoint Source Pollution and Hillslope Hydrology. 2001. Kentucky Water Resources Research Institute. \$10,000.
- Coarse Woody Debris Cycling in Eastern Kentucky Riparian Zones. 2001. University of Kentucky Undergraduate Research and Creativity Grants. \$3,000.
- Coarse Woody Debris Cycling in Eastern Kentucky Riparian Zones. 2001. Environmental Field Station Grant, Savannah River Site. \$4,000.
- Forestry Student Summer Camp Scholarships. 2001. Kentucky Wood Products Competitive Corporation. \$3,000.
- Forestry Student Summer Camp Scholarships. 2000. Kentucky Wood Products Competitive Corporation. \$4,000.
- Defining Perennial, Intermittent and Ephemeral Channels in Eastern Kentucky; Application to Forestry Best Management Practices. 1999. Kentucky Water Resources Research Institute. \$6,000.
- Site-specific analysis of a wetland restoration project. 1999. University of Kentucky Undergraduate Research and Creativity Grants. \$3,000.
- Impact Assessment of Forest Harvesting on Blanton Forest. 1999. Kentucky State Nature Preserves. \$25,000.
- Recovery and rehabilitation of skid trails and haul roads. 1999. USDA Forest Service. \$37,000.
- USDA Forest Service Equipment Grant. 1998. For purchase of an ICP-AES. \$95,000.
- Bottomland hardwood seedbank dynamics along a successional gradient. 1997. Education, Research and Development Association of Georgia Universities (ERDA). \$70,000.
- Influence of canopy cover and forest succession on litter decomposition in bottomland hardwood wetlands. 1997. Oak Ridge Institute for Science and Education (ORISE). \$9,000.
- Influence of particulates on the transport of mercury through forested watersheds. 1996. Water Resources Research Council (WRRC). \$50,000.