

## Appendix K: Research Publications (2001–2011)

- Asbjornsen, H., L. A. Brudvig, and M. D. Tomer. 2007. "Ecohydrological implications of restoring Midwestern bur oak savannas after woody encroachment." *Ecological Restoration* 25: pp. 58–59.
- Asbjornsen, H., G. Mora, and M. Helmers. 2007. "Variation in water uptake dynamics among contrasting agricultural and native plant communities in the Midwestern U.S." *Agriculture, Ecosystems, and Environment* 121: pp. 343–356.
- Asbjornsen, H., M. D. Tomer, M. Gomez-Cardenas, L. A. Brudvig, C. M. Greenan, and K. Schilling. 2007. "Tree and stand transpiration in a Midwestern bur oak savanna after elm encroachment and restoration thinning." *Forest Ecology and Management* 247: pp. 209–219.
- Asbjornsen, H., G. Shepard, M. Helmers, and G. Mora. 2008. "Seasonal patterns in depth of water uptake under contrasting annual and perennial systems in the Corn Belt Region of the Midwestern U.S." *Plant and Soil* 308: pp. 69–92.
- Atwell, R. C., L. A. Shulte, and L. M. Westphal. 2009. "Landscape, community, countryside: linking biophysical and social scales in US Corn Belt agricultural landscapes." *Land Use Policy* 24: pp. 791–804.
- Atwell, R. C., L. A. Shulte, and L. M. Westphal. 2009. "Linking resilience theory and diffusion of innovations theory to understand the potential for perennials in the U.S. Corn Belt." *Ecology and Society* 14(1).
- Atwell, R. C., L. A. Shulte, and L. M. Westphal. 2010. "How to build multifunctioning agricultural landscapes in the U.S. Corn Belt: Add perennials and partnerships." *Land Use Policy* 27: pp. 1082–1090.
- Atwell, R. C., L. A. Shulte, and L. M. Westphal. 2011. "Tweak, adapt, or transform: Policy scenarios in response to emerging bioenergy markets in the U.S. Corn Belt." *Ecology and Society* 16(1).
- Brudvig, L. A., and C. M. Mabry. 2008. "Trait-based filtering of the regional species pool to guide understory plant reintroduction in Midwestern oak savannas, USA" *Restoration Ecology* 16: pp. 290–304.
- Camberdella, C., T. Isenhardt, K. E. Schilling, P. Drobney, and R. Schultz. 2003. "Soil carbon assessment across a native prairie restoration chronosequence." *Proceedings of the 18<sup>th</sup> Annual North American Prairie Conference* 18: pp. 49–53.
- Drobney, P. M. and K. E. Schilling. 2003. "Treatment of reed canarygrass monoculture improves water table levels for sedge meadow restoration (Iowa)." *Restoration and Management Notes* 21: pp. 323–324.
- Guzman, J.G. and M. M. Al-Kaisi. 2009. "Soil carbon dynamics and carbon budget of newly reconstructed tall-grass prairies in south central Iowa." *Journal of Environmental Quality* 39: pp. 136–146.
- Guzman, J. G. and M. M. Al-Kaisi. 2010. "Landscape position and age of a reconstructed prairie effect on soil organic carbon sequestration rate and aggregate associated carbon." *Journal of Soil and Water Conservation* 65: pp. 9–21.
- Halbert, N. D. and J. N. Derr. 2007. "A comprehensive evaluation of cattle introgression into US federal bison herds." *Journal of Heredity* 98: pp. 1–12.
- Halbert, N. D., P. J. P. Gogan, R. Hieber, and J. N. Derr. 2007. "Where the buffalo roam: The history and genetics in the conservation of bison on U.S. federal lands." *Park Science* 24: pp. 22–29.

- Halbert, N. D. and J. N. Derr. 2008. "Patterns of genetic variation in US federal bison herds." *Molecular Ecology* 17: pp. 4963–4977.
- Hedrick, P. W. 2009. "Conservation genetics and North American bison (*Bison bison*)." *Journal of Heredity* 100: 411–420.
- Hernandez-Santana, V., X. Zhou, M. Helmers, H. Asbjornsen, and R. K. Kolka. 2010. "Effectiveness of perennial vegetation strips in reducing runoff in annual crop production systems." American Geophysical Union Fall Meeting.
- Larson, D. L., J. B. Bright, P. Drobney, J. L. Larson, N. Palaia, P. A. Rabia, S. Vacek, and D. Wells. 2011. "Effect of planting method and seed mix richness on the early stages of tallgrass prairie restoration." *Biologic Conservation* 144: pp. 3127–3139.
- Li, Z. and Y. Zhang. 2003. "Temporal scaling and numerical simulations of the hydraulic head and river baseflow." *Eos (Transactions of the American Geophysical Union)* 84: F589.
- Li, Z., Y. Zhang. 2004. "Dynamic sediment modeling in Iowa streams and rivers: a case study at Walnut Creek." *Eos (Transactions of the American Geophysical Union)* 85: H43A–O362.
- Li, Z., Y. K. Zhang, K. E. Schilling, and M. Skopec. 2006. "Cokriging estimation of daily suspended sediment loads." *Journal of Hydrology* 327: pp. 389–398.
- Losure, D. A., B. J. Wilsey, and K. A. Moloney. 2007. "Evenness-invasibility relationships differ between two extinction scenarios in tallgrass prairie." *Oikos* 116: pp. 87–98.
- Mabry, C. M., L. Brudvig, and R. C. Atwell. 2010. "The confluence of landscape context and site-level management in determining Midwestern savanna and woodland breeding bird communities." *Forest Ecology and Management* 260: pp. 42–51.
- Maher, R. M., H. Asbjornsen, R. K. Kolka, C. A. Cambardella, and J. W. Raich. 2010. "Changes in soil respiration across a chronosequence of tallgrass prairie reconstruction." *Agriculture, Ecosystems, and Environment* 139(4): pp. 749–753.
- Maher, R., H. Asbjornsen, R. Kolka, and J. Raich. (in press). "Comparative soil respiration and rooting dynamics in a restored prairie and soybean field in Central Iowa." *Agriculture, Ecosystems, and Environments*.
- Martian, L. M., K. A. Moloney, and B. J. Wilsey. 2005. "An assessment of grassland restoration success using species diversity components." *Journal of Applied Ecology* 42: pp. 327–336.
- Martin, L. M. and B. J. Wilsey. 2006. "Assessing grassland restoration success: Relative roles of seed additions and native ungulate activities." *Journal of Applied Ecology* 43: pp. 1098–1109.
- Mateos R. V., H. Asbjorsen, J. M. Tarara, and T. J. Sauer. 2008. "Evaluating transpiration in an annual crop and perennial prairie species using the heat balance method in central Iowa, USA." *International Workshop on Sap Flow. Conference Booklet*.
- O'Brien, J. P. and J. L. Pease. 2004. "The effects of a national wildlife refuge's EE programs on elementary school classes' knowledge and attitudes." *Journal of Interpretation Research* 9: pp. 27–45.
- Olechnowski, B. F. M., D. M. Debinski, P. Drobney, K. Viste-Sparkman, and W. T. Reed. 2009. "Changes in vegetation structure through time in a restored tallgrass prairie ecosystem and implications for avian diversity and community composition." *Ecological Restoration* 27: pp. 449–457.

- Perez-Bidegain, M., J. M. Helmers, and R. Cruse. 2010. "Modeling phosphorous transport in an agricultural watershed using the WEPP model." *Journal of Environmental Quality* 39: pp. 2121–2129.
- Ries, L. and D. M. Bebinski. 2001. "Butterfly responses to habitat edges in the highly fragmented prairies of Central Iowa." *Journal of Animal Ecology* 70: pp. 840–852.
- Schilling, K. E. 2001. "Effects of prairie restoration on water quality in the Walnut Creek watershed, Jasper County, Iowa." *Proceedings of the 17<sup>th</sup> Annual North American Prairie Conference* 17: pp. 145–150.
- Schilling, K. E. 2001. "Prairie restoration as a BMP for water quality improvement: evidence from the Walnut Creek Watershed, Jasper County, Iowa." *Proceedings of the 17<sup>th</sup> Annual North American Prairie Conference* 17: pp. 138–144.
- Schilling, K. E. 2002. "Chemical transportation paired agricultural and restored prairie watersheds." *Journal of Environmental Quality* 31: pp. 1184–1193.
- Schilling, K. E. 2002. "Reduced baseflow transport of agricultural pollutants along a restored prairie riparian corridor in Iowa." AWRA Specialty Conference, Ground Water/Surface Water Interactions. pp. 155–160.
- Schilling, K. E. 2007. "Water table fluctuations under three riparian land covers in Iowa, USA." *Hydrological Processes* 21: pp. 2421–2424.
- Schilling K. E. 2009. "Investigating local variation in groundwater recharge along a topographical gradient, Walnut Creek, USA." *Hydrogeology Journal* 17: pp. 397–407.
- Schilling, K. E. and P. Jacobson. 2008. "Groundwater nutrient concentrations near an incised Midwestern stream: effects of floodplain lithology and land management." *Biogeochemistry* 87: pp. 199–216.
- Schilling, K. E. and P. Jacobson. 2009. "Groundwater conditions under a reconstructed prairie chronosequence." *Agriculture, Ecosystems and Environment* 135: pp. 81–89.
- Schilling, K. E. and J. R. Kiniry. 2007. "Estimation of evapotranspiration by reed canarygrass using field observations and model systems." *Journal of Hydrology* 337: pp. 356–363.
- Schilling, K. E., Z. Li, and Y. K. Zhang. 2006. "Groundwater-surface interaction in the riparian zone of an incised channel, Walnut Creek, Iowa." *Journal of Hydrology* 327: pp. 140–150.
- Schilling, K. E., J. A. Palmer, E. A. Bettis, P. Jacobson, R. C. Schultz, and T. M. Isenhardt. 2009. "Vertical distribution of total carbon, nitrogen, and phosphorus in riparian soils of Walnut Creek, southern Iowa." *CATENA* 77: pp. 266–273.
- Schilling, K. E., Y. K. Zhang, and P. M. Drobney. 2004. "Water table fluctuations near incised stream, Walnut Creek, Iowa." *Journal of Hydrology* 286: pp. 236–248.
- Schilling, K. E. and J. Spooner. 2006. "Effects of watershed-scale land use change on stream nitrate concentrations." *Journal of Environmental Quality* 35: pp. 2132–2145
- Schilling K. E., M. D. Tomer, P. W. Gassman, C. L. Kling, T. M. Isenhardt, T. B. Morrman, W. W. Simpkins, and C. F. Wolter. 2007. "A tale of three watersheds: nonpoint source pollution and conservation practices across Iowa." *Choices* 22: pp. 87–95.
- Schilling, K. E., M. D. Tomer, Y. K. Zhang, T. Weisbrod, P. Jacobson, C. A. Cambardella, C. A. 2007. "Hydrogeologic controls on nitrate transport in a small agricultural catchment." *Journal of Geophysical Research* 112.

- Schilling, K. E. and C. F. Wolter. 2007. "A GIS-based groundwater travel time model to evaluate stream nitrate concentration reductions from land use change." *Environmental Geology* 53: pp. 433–443.
- Schilling, K. E. and C. F. Wolter. 2001. "Contribution to nonpoint source pollution loads in an agricultural watershed." *Ground Water* 39: pp. 49–58.
- Schmidt, N., M. O'Neal, and L. A. Shulte. 2011. "Effects of grassland habitat and plant nutrients on soybean aphid and natural enemy populations." *Environmental Entomology* 40(2): pp. 260–272.
- Shepard, S. and D. M. Debinski. 2005. "Evaluation of isolated and integrated prairie reconstruction as habitat for prairie butterflies." *Biological Conservation* 126: pp. 51–61.
- Shepard, S., D. M. Debinski. 2005. "Reintroduction of Regal Fritillary (*Speyeria idalia*) to a restored prairie." *Ecological Restoration* 23: pp. 244–250.
- Summerville, K. 2008. "Year effects and prairie Lepidoptera: are moth communities stable entities over a short time period." *Proceedings of the 20<sup>th</sup> Annual North American Prairie Conference* 20: pp. 127–143.
- Summerville, K. S., A. C. Bonte, and L. C. Fox. 2007. "Short-term temporal effects on community structure of Lepidoptera in restored and remnant tallgrass prairie." *Restoration Ecology* 15: pp. 179–188.
- Summerville, K. S., C. J. Conoan, and R. M. Steichen. 2006. "Species traits of lepidopteran composition in restored and remnant tallgrass prairies." *Ecological Applications* 16: pp. 891–900.
- Summerville, K. S., R. M. Steichen, and M.N. Lewis. 2005. "Restoring lepidopteran communities to oak savannas: Contrasting influences of habitat quantity and quality." *Restoration Ecology* 13: pp. 120–128.
- Wolfe-Bellin, K. S. and K. A. Moloney. 2001. "Successional vegetation dynamics on pocket gopher mounds in an Iowa tallgrass prairie." *Proceedings of the 17<sup>th</sup> Annual North American Prairie Conference* 17: 153–163.
- Yurkonis, K. A., B. J. Wilsey, K. A. Moloney, P. Drobney, and D. L. Larson. (in press). "Warm-season grass abundance and distribution differs between drill and broadcast seeded grasslands." *Journal of Applied Ecology*.
- Yurkonis, K. A., B. J. Wilsey, K. A. Moloney, P. Drobney, and D. L. Larson. 2010. "Seeding method influences warm-season grass abundance and distribution but not local diversity in grassland restoration." *Restoration Ecology* 18(2): pp. 344–353.
- Yurkonis, K. A., B. J. Wilsey, K. A. Moloney, and A. G. Van der Valk. 2010. "The impact of seeding method on diversity and plant distribution in two restored grasslands." *Restoration Ecology* 18: pp. 311–321.
- Zhang, Y. K. and K. E. Schilling. (2004). "Temporal scaling of hydraulic head and river baseflow with implication for groundwater recharge." *Water Resource Research* 40: W03504.
- Zhang, Y. K. and K. E. Schilling. 2004. "Impact of vegetation on main hydrological processes: a field study and its implication for water quality." *Advance in Earth Sciences* 19: pp. 422–428.
- Zhang, Y. K. and K. E. Schilling. 2006. "Effects of land cover on water table, soil moisture, evapotranspiration, and groundwater recharge: A field observation and analysis." *Journal of Hydrology* 319: pp. 328–338.
- Zhou, X., M. Helmers, H. Asbjorsen, R. Kolka, and M. D. Tomer. 2010. "Perennial filter strips reduce nitrate levels in soil and shallow groundwater after grassland-to-cropland conversion." *Journal of Environmental Quality* 39(6): pp. 2006–2015.