

## James S. Adelman, Assistant Professor

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### Publications since 2008: (\*undergraduate student author, \*\*graduate student author)

- Adelman, J.S.**, I.T. Moore, and D.M. Hawley. 2015. House finch responses to *Mycoplasma gallisepticum* do not vary with experimentally increased aggression. *Journal of Experimental Zoology, Part A* 323: 39-51.
- Adelman, J.S.** 2015. Immune systems: linking organisms, populations, and evolution through disease. In *Integrative Organismal Biology*, (L.B. Martin, C.K. Ghalambor, and H.A. Woods, eds.).
- Núñez, C.M.V., **J.S. Adelman**, and D.I. Rubenstein. 2015. Sociality increases juvenile survival after a catastrophic event in the feral horse (*Equus caballus*). *Behavioral Ecology* 26: 138-147.
- Hau, M., M.F. Haussmann, T.J. Greives, C. Matlack, D. Costantini, M. Quetting, **J.S. Adelman**, A.C. Miranda, and J. Partecke. 2015. Repeated stressors in adulthood increase the rate of biological ageing. *Frontiers in Zoology* 12:4.
- Adelman, J.S.**, S.C. Moyers\*\*, and D.M. Hawley. 2014. Using remote biomonitoring to understand heterogeneity in immune-responses and disease-dynamics in small, free-living animals. *Integrative and Comparative Biology* 54: 377-386.
- Downs, C.J., **J.S. Adelman**, and G.E. Demas. 2014. Methods and mechanisms in ecoimmunology. *Integrative and Comparative Biology* 54: 340-352.
- Núñez, C.M.V., **J.S. Adelman**, J. Smith\*, L.R. Gesquiere, and D.I. Rubenstein. 2014. Linking social environment and stress physiology in feral mares (*Equus caballus*): group transfers elevate fecal cortisol levels. *General and Comparative Endocrinology* 196: 26-33.
- Adelman, J.S.**, L. Kirkpatrick, J.L. Grodio\*\*, and D.M. Hawley. 2013. House finch populations differ in early inflammatory signaling and pathogen tolerance at the peak of *Mycoplasma gallisepticum* infection. *The American Naturalist* 181: 674-689.
- Adelman, J.S.**, A.W. Carter\*\*, W.A. Hopkins, and D.M. Hawley. 2013. Deposition of pathogenic *Mycoplasma gallisepticum* onto bird feeders: host pathology is more important than temperature-driven increases in food intake. *Biology Letters* 9: 20130594.
- Adelman, J.S.**, D.R. Ardia, and K.A. Schat. 2013. *Ecoimmunology*. In *Avian Immunology*, (K.A. Schat, B. Kaspers, and P. Kaiser, eds), 2nd edition. Elsevier, Amsterdam.
- Núñez, C.M.V., **J.S. Adelman**, and D.I. Rubenstein. 2013. A free-ranging, feral mare (*Equus caballus*) affords similar maternal care to her genetic and adopted offspring. *The American Naturalist* 182: 674-681.
- Lopes\*\*, P.C., **J.S. Adelman**, J.C. Wingfield, and G.E. Bentley. 2012. Social context modulates sickness behavior. *Behavioral Ecology and Sociobiology* 66: 1421-1428.
- Hawley, D.M., S.E. DuRant\*\*, A. Wilson\*, **J.S. Adelman**, and W.A. Hopkins. 2012. Additive metabolic costs of thermoregulation and pathogen infection. *Functional Ecology* 26: 701-710.
- Bisson, I.A., L. K. Butler, P. Kelley, **J.S. Adelman**, T.J. Hayden, L.M. Romero, and M. Wikelski. 2011. Energetic response to human disturbance in an endangered songbird. *Animal Conservation* 14: 484-491.
- Adelman, J.S.**, S. Córdoba-Córdoba, K. Spoelstra, M. Wikelski, and M. Hau. 2010. Radiotelemetry reveals variation in fever and sickness behaviours with latitude in a free-living passerine. *Functional Ecology* 24: 813-823.
- Adelman, J.S.**, G.E. Bentley, J.C. Wingfield, L.B. Martin, and M. Hau. 2010. Population differences in fever and sickness behaviors in a wild passerine: a role for cytokines. *Journal of Experimental Biology* 213: 4099-4109.
- Adelman, J.S.** and L.B. Martin. 2010. Immune systems and sickness behavior. In *Encyclopedia of Animal Behavior* (M. Breed and J. Moore, eds), Vol. 2, pp. 133-137. Elsevier, Amsterdam.
- Núñez, C.M.V., **J.S. Adelman**, and D.I. Rubenstein. 2010. Immunocontraception in wild horses (*Equus caballus*) extends reproductive cycling beyond the normal breeding season. *PLoS One* 5: e1365.
- Adelman, J.S.** and L.B. Martin. 2009. Vertebrate sickness behaviors: adaptive and integrated neuroendocrine immune responses. *Integrative and Comparative Biology* 49: 202-214.
- Núñez, C.M.V., **J.S. Adelman**, C. Mason, and D.I. Rubenstein. 2009. Immunocontraception decreases group fidelity in a feral horse population during the non-breeding season. *Applied Animal Behaviour Science* 117: 74-83.
- Safran, R.J., **J.S. Adelman**, K.J. McGraw, and M. Hau. 2008. Sexual signal exaggeration affects physiological state in male barn swallows. *Current Biology* 18: r461-462.
- Roemer, S.C., **J.S. Adelman**, M.E.A. Churchill, and D.P. Edwards. 2008. Mechanism of high-mobility group protein B enhancement of progesterone receptor sequence-specific DNA binding. *Nucleic Acids Research* 36: 3655-3666.

## Julie A. Blanchong, Associate Professor

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### Publications since 2008

- Blanchong, J.A.**, J.T. Foster, S.J. Robinson, and M.D. Samuel. In review. Application of genetics and genomics to wildlife epizootiology. *Journal of Wildlife Management*, invited review.
- Reiter-Marolf, W.J., S.J. Dinsmore, and **J.A. Blanchong**. In revision. An evaluation of excrement as an alternative to blood for characterizing lead exposure in bald eagles. *Wildlife Society Bulletin*.
- Randall, N.J., B.J. Blitvich, and **J.A. Blanchong**. 2013. Association between agricultural land use and West Nile virus seroprevalence in Iowa birds. *Journal of Wildlife Diseases* 49:869-873.
- Blanchong, J.A.**, A.B. Sorin, and K.T. Scribner. 2013. Genetic diversity and population structure in urban white-tailed deer. *Journal of Wildlife Management* 77:855-862.
- Lang, K.R. and **J.A. Blanchong**. 2012. Population genetic structure of white-tailed deer: understanding risk of chronic wasting disease spread. *Journal of Wildlife Management* 76:832-840.
- Sippy, R., C. Sandoval-Green, O. Sahin, P. Plummer, W.S. Fairbanks, Q. Zhang, and **J.A. Blanchong**. 2012. Occurrence and molecular analysis of *Campylobacter* in wildlife on livestock farms. *Veterinary Microbiology* 157:369-375.
- Blanchong, J.A.**, D.A. Grear, B.V. Weckworth, D.P. Keane, K.T. Scribner, and M.D. Samuel. 2012. Effects of chronic wasting disease on reproduction and fawn harvest vulnerability in Wisconsin white-tailed deer. *Journal of Wildlife Diseases* 48:361-370
- Randall, N.J., B.J. Blitvich, and **J.A. Blanchong**. 2012. The efficacy of wildlife rehabilitation centers in the surveillance and monitoring of pathogen activity: A case study with West Nile virus. *Journal of Wildlife Diseases* 48:648-653.
- Blanchong, J.A.**, D.M. Heisey, K.T. Scribner, S.V. Libants, C. Johnson, J.M. Aiken, J.A. Langenberg, and M.D. Samuel. 2009. Genetic susceptibility to chronic wasting disease in free-ranging white-tailed deer: Complement component C1q and Prnp polymorphisms. *Infection, Genetics and Evolution* 9:1329-1335.
- Blanchong, J.A.**, M.D. Samuel, K.T. Scribner, B.V. Weckworth, J.A. Langenberg, and K.B. Filcek. 2008. Landscape genetics and the spatial distribution of chronic wasting disease. *Biology Letters* 4:130-133.
- Conner, M.M., M.R. Ebinger, **J.A. Blanchong**, and P.C. Cross. 2008. Infectious disease in cervids of North America: data, models, and management challenges. *Annals of the New York Academy of Sciences* 1134:146-172.

## Sue Blodgett, *Chair and Professor*

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### Refereed Publications since 2008

- Rand, T.A., D.K. Waters, **S.L. Blodgett**, J.J. Knodel, and M.O. Harris. 201X. Increased area of a highly suitable host crop increases herbivore pressure in intensified agricultural landscapes. *Agriculture, Ecosystems and Environment* 186:135-143.
- Lenssen, A.W., D.S. Long, W.E. Grey, **S.L. Blodgett**, and H.B. Goosey. 2013. Spring Wheat Production and Associated Pests in Conventional and Diversified Cropping Systems in North Central Montana. *Crop Management*. DOI 10.1094/CM-2013-0017-RS.
- Pearce, A.M., K.M. O'Neill, R.S. Miller, and **S. Blodgett**. 2012. Diversity of flower-visiting bees and their pollen loads on a wildflower seed farm in Montana. *J. Kansas Entomol. Soc.* 85:97-108.
- Lenssen, A.W., W.M. Iversen, U.M. Sainju, T.C. Caesar-TonThat, **S.L. Blodgett**, B. Allen, and R.G. Evans. 2012. Yield, Pests, and Water Use of Durum and Selected Crucifer Oilseeds in Two-year Rotations. *Agronomy Journal*. 104:1295-1304.
- Ritter, R., A.W. Lenssen, **S. Blodgett**, and M. Taper. 2010. Regional Assemblages, *Lygus* (Heteroptera: Miridae) in Montana canola fields. *J. Kansas Entomol. Soc.:* 83:297-305.
- Lenssen, A.W., D.C. Cash, P.G. Hatfield, U.M. Saninju, W.R. Grey, **S.L. Blodgett**, H.B. Goosey, and G.D. Johnson. 2010. Yield, Quality, Water and Nitrogen Use of Durum and Selected Annual Forages in Two-year Rotations. *Agronomy Journal* 102:1261-1268.
- O'Neill, K.M., **S. Blodgett**, B.E. Olson, and R.S. Miller. 2008. Impact of livestock grazing on abundance of Miridae and Reduviidae (Hemiptera) in Crested Wheatgrass pastures. *J. Econ. Entomol.* 101:309-311.

## Steven Bradbury, Professor: NREM and Entomology

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### Peer-Reviewed Journal Articles since 2008

- Bradbury, S.P.**, C.L. Russom, P.K. Schmieder, T.W. Schultz, R. Diderich, and C.M. Auer. 2014. Advancing computational toxicology in a regulatory setting: A selected review of the accomplishments of Gilman D. Veith (1944–2013). *Appl. In Vitro Toxicol.* 1:11-20.
- Russom, C.L., **S.P. Bradbury**, S.J. Broderius, D.J. Hammermeister, R.A. Drummond, and G.D. Veith. 2013. Predicting modes of toxic action from chemical structure. *Environ. Toxicol. Chem.* 32:1441-1442.
- Sappington, K.G., T.S. Bridges, **S.P. Bradbury**, R.J. Erickson, A.J., Hendriks, R.P. Lanno, J.P. Meador, D.R. Mount, M.H. Salazar, and D.J. Spry. 2011. Application of the tissue residue approach in ecological risk assessment. *Integr. Environ. Assess. Manag.* 7:116-140.
- Dellarco, V., T. Henry, P. Sayre, J. Seed, and **S.P. Bradbury**. 2010. Meeting the common needs of a more effective and efficient testing and assessment paradigm for chemical risk management. *J. Toxicol. Environ. Health, Part B*, 13:347-360.

### Peer-Reviewed Book Chapters since 2008

- Bradbury, S.P.**, R.W. Carlson, T.R. Henry, S. Padilla, and J. Cowden. 2008. Toxic Responses of the Fish Nervous System. In: *The Toxicology of Fishes*. DiGiulio, R. and Hinton, D. (Eds.), Taylor & Francis, Boca Raton, FL (pp. 417-456).

### Iowa State University Reports since 2008

- Bradbury, S.P.** (Ed.) 2015. Resistance management: Whose problem and whose job? Proceedings of a state of Iowa conference. <http://www.ipm.iastate.edu/content/pesticide-resistance-workshop-2015>

## Stephen J. Dinsmore, Associate Chair and Professor

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### Publications since 2008

- Harms, T.M. and **S.J. Dinsmore**. 2015. Density, abundance, and habitat associations of the Inland Swamp Sparrow (*Melospiza georgiana georgiana*) in Iowa. *Wilson Journal of Ornithology* [100% design, 25% analyses, 10% writing]
- Harms, T.M. and **S.J. Dinsmore**. 2015. Spatial scale matters when modeling avian co-occurrence. *Ecosphere* [100% design, 25% analyses, 10% writing]
- Koczur, L.M., A.E. Munters, S.A. Heath, B.M. Ballard, M.C. Green, **S.J. Dinsmore**, and F. Hernandez. 2014. Reproductive success of the American Oystercatcher (*Haematopus palliatus*) in Texas. *Waterbirds*, in press. [0% design, 10% analyses, 10% writing]
- Murphy, K.T. and **S.J. Dinsmore**. 2014. Stopover dynamics of fall migrant Pectoral Sandpipers in Iowa. *Wader Study Group Bulletin* 121:186-192. [90% design, 25% analyses, 10% writing]
- Dinsmore, S.J.**, D.J. Lauten, K.A. Castelein, E.P. Gaines, and M.A. Stern. 2014. Effects of predator and habitat management on Snowy Plover nest survival in Oregon. *The Condor* 116:619-628. [0% design, 90% analyses, 75% writing]
- Harms, T.M., K.E. Kinkead, and **S.J. Dinsmore**. 2014. Evaluating the effects of landscape configuration on site occupancy and metapopulation dynamics of Odonates in Iowa. *Journal of Insect Conservation* 18:307-315. [0% design, 25% analyses, 10% writing]
- Gillespie, M.K. and **S.J. Dinsmore**. 2014. Nest survival of Red-winged Blackbirds in areas developed for wind energy. *Agriculture, Ecosystems, and the Environment* 197:53-59. [90% design, 25% analyses, 10% writing]
- Alverson, K. and **S.J. Dinsmore**. 2014. Factors affecting Burrowing Owl (*Athene cunicularia*) occupancy of prairie dog colonies. *Condor* 116:242-250. [100% design, 50% analyses, 50% writing]
- Conover, R.R., **S.J. Dinsmore**, and L.W. Burger, Jr. 2014. Effects of set-aside conservation practices on bird community structure within an agricultural landscape. *American Midland Naturalist* 172:61-75. [50% design, 25% analyses, 10% writing]
- Harms, T.M. and **S.J. Dinsmore**. 2014. Influence of season and time of day on marsh bird detections. *Wilson Journal of Ornithology* 126:30-38. [100% design, 25% analyses, 10% writing]
- Skrade, P.D.B. and **S.J. Dinsmore**. 2013. Egg crypsis in a ground-nesting shorebird influences nest survival. *Ecosphere* 4 (12). [90% design, 25% analyses, 10% writing]
- Wiewel, A.N.M., **S.J. Dinsmore**, and J.A. Collazo. 2013. Nest survival and breeding biology of the Puerto Rican Bullfinch (*Loxigilla portoricensis*) in southwestern Puerto Rico. *The Wilson Journal of Ornithology* 125:725-730.
- Colwell, M.A., W.J. Pearson, L. Eberhart-Phillips, and **S.J. Dinsmore**. 2013. Apparent survival of Snowy Plovers varies with reproductive effort, year, and between sexes. *Auk* 130:725-732.
- Dzul, M.C., M.C. Quist, **S.J. Dinsmore**, and D.B. Gaines. 2013. Coarse-scale movement patterns of a small-bodied fish inhabiting a desert stream environment. *Journal of Freshwater Ecology* 28:27-38.
- Collazo, J.A., P. Fackler, K. Pacifici, T. White, I. Llerandi-Roman, and **S.J. Dinsmore**. 2013. Optimal allocation of captive-reared Puerto Rican Parrots: decisions when divergent dynamics characterize managed populations. *Journal of Wildlife Management* 77:1124-1134.
- Dzul, M.C., **S.J. Dinsmore**, M.C. Quist, D.B. Gaines, K.P. Wilson, M.R. Bower, and P.M. Dixon. 2013. Developing a simulation model of the Devils Hole Pupfish population using monthly length frequency distributions. *Population Ecology* 55:325-341.
- Skrade, P.D.B. and **S.J. Dinsmore**. 2013. Egg-size investment in a rapid multi-clutch parental care system. *Condor* 115:508-514.
- Dzul, M.C., P.M. Dixon, M.C. Quist, **S.J. Dinsmore**, M.R. Bower, K.P. Wilson, and D.B. Gaines. 2013. Using variance components to estimate power in a hierarchical sampling design: improving monitoring of larval Devils Hole pupfish. *Environmental Monitoring and Assessment* 185:405-414.
- Harms, T.M. and **S.J. Dinsmore**. 2013. Habitat associations of secretive marsh-birds in Iowa. *Wetlands* 33:561-571.
- Dinsmore, S.J.** 2013. Mountain Plover responses to deltamethrin treatments on prairie dog colonies in Montana. *Ecotoxicology* 22:415-424.
- Dzul, M.C., D.B. Gaines, J.R. Fischer, M.C. Quist, and **S.J. Dinsmore**. 2012. Evaluation of Salt Creek Pupfish otoliths for use in age and growth analyses. *Southwestern Naturalist* 57:412-416.

- Harms, T.M., R.D. Rasmussen, K.E. Kinkead, C.L. Bergthold, P. Frese, and **S.J. Dinsmore**. 2012. New additions to Iowa Odonata. *Argia* 24:30-31.
- Pearse, A.T., R.M. Kaminski, K.J. Reinecke, and **S.J. Dinsmore**. 2012. Local and landscape associations between wintering dabbling ducks and wetland complexes in Mississippi. *Wetlands* 32:859-869.
- Gregory, C.J., **S.J. Dinsmore**, L.A. Powell, and J.G. Jorgensen. 2012. Estimating the abundance of Long-billed Curlews in Nebraska. *Journal of Field Ornithology* 83:122-129.
- Harms, T.M. and **S.J. Dinsmore**. 2012. Density and abundance of secretive marsh-birds in Iowa. *Waterbirds* 35:208-216.
- Skrade, P.D.B., and **S.J. Dinsmore**. 2012. Incubation patterns of a shorebird with rapid multiple clutches, the Mountain Plover (*Charadrius montanus*). *Canadian Journal of Zoology* 90:257-266.
- Dzul, M.C., M.C. Quist, **S.J. Dinsmore**, P.M. Dixon, M.R. Bower, K.P. Wilson, and D.B. Gaines. 2012. Identifying sources of error in surveys of Devils Hole pupfish (*Cyprinodon diabolis*). *Southwestern Naturalist* 57:44-50.
- Hovick, T.J., J.R. Miller, **S.J. Dinsmore**, D.M. Engle, D.M. Debinski, and S.D. Fuhlendorf. 2012. Effects of fire and grazing on Grasshopper Sparrow nest survival in a fragmented landscape. *Journal of Wildlife Management* 76:19-27.
- Gregory, C.J., **S.J. Dinsmore**, L.A. Powell, and J.G. Jorgensen. 2011. Nest survival of Long-billed Curlew in Nebraska. *Wader Study Group Bulletin* 118:109-113.
- Dinsmore, S.J.** and T.M. Harms. 2011. First record of a Comb Duck (*Sarkidiornis melanotos sylvicola*) for Costa Rica. *North American Birds* 65:362-363.
- Conover, R.R., **S.J. Dinsmore**, and L.W. Burger, Jr. 2011. Effects of conservation practices on bird nest density and survival in intensive agriculture. *Agriculture, Ecosystems, and the Environment* 141:126-132.
- Bower, M.R., D.B. Gaines, K.P. Wilson, M.C. Dzul, M.C. Quist, and **S.J. Dinsmore**. 2011. Accuracy and precision of visual estimates and photogrammetric measurements of the length of a small-bodied fish. *North American Journal of Fish Management* 31:138-143.
- Colwell, M.A., J.J. Meyer, M.A. Hardy, S. McAllister, A. Transou, R. LeValley, and **S.J. Dinsmore**. 2011. Western Snowy Plovers *Charadrius alexandrinus nivosus* select nesting substrates that enhance egg crypsis and improve nest survival. *Ibis* 153:303-311.
- Mullin, S.M., M.A. Colwell, S.A. McAllister, and **S.J. Dinsmore**. 2010. Apparent survival and population growth of Snowy Plovers in coastal northern California. *Journal of Wildlife Management* 74:1792-1798.
- Skrade, P.D.B., and **S.J. Dinsmore**. 2010. Dispersal patterns in the Mountain Plover (*Charadrius montanus*). *Auk* 127:671-677.
- Dinsmore, S.J.**, M.B. Wunder, V.J. Dreitz, and F.L. Knopf. 2010. An assessment of factors affecting population growth of the Mountain Plover. *Avian Conservation and Ecology* 5(1):5 [on-line] URL: <http://www.ace-eco.org/vol5/iss1/art5/>.
- Hanson, K.C., T.L. DeVault, and **S.J. Dinsmore**. 2010. Increased abundance of Neotropical Cormorants on the Alluvial Plain of Mississippi. *Southeastern Naturalist* 9:385-394.
- Dinsmore, S.J.** and M.D. Smith. 2010. Mountain Plover responses to plague in Montana. *Vector Borne and Zoonotic Diseases* 10:37-45.
- Holt, R.D., L.W. Burger, Jr., **S.J. Dinsmore**, M.D. Smith, S.J. Szukaitis, and K.D. Godwin. 2009. Effects of radio-marking on early post-release survival of Northern Bobwhite. *Journal of Wildlife Management* 73:989-995.
- Pearse, A.T., K.J. Reinecke, R.M. Kaminski, and **S.J. Dinsmore**. 2009. Using simulation to improve wildlife surveys: wintering mallards in Mississippi, USA. *Wildlife Research* 36:279-288.
- Childers, T.M. and **S.J. Dinsmore**. 2008. Density and abundance of Mountain Plovers in northeastern Montana. *The Wilson Journal of Ornithology* 120:700-707.
- Pearse, A.T., **S.J. Dinsmore**, R.M. Kaminski, and K.J. Reinecke. 2008. Evaluation of an aerial survey to estimate abundance of wintering ducks in western Mississippi. *Journal of Wildlife Management* 72:1413-1419.
- Dinsmore, S.J.** 2008. Black Skimmer nest survival in Mississippi. *Waterbirds* 31:24-29.
- Augustine, D.J., **S.J. Dinsmore**, M.B. Wunder, V.J. Dreitz, and F.L. Knopf. 2008. Plovers, prairie dogs and plague: Response of a declining grassland bird to black-tailed prairie dog colony dynamics in landscapes affected by plague. *Landscape Ecology* 23:689-697.
- Dinsmore, S.J.** 2008. Influence of drought on annual survival of the Mountain Plover in Montana. *Condor* 110:45-54.
- Pearse, A.T., P.D. Gerard, **S.J. Dinsmore**, R.M. Kaminski, and K.D. Reinecke. 2008. Estimation and correction of visibility bias in aerial surveys of wintering ducks. *Journal of Wildlife Management* 72:808-813.

## Richard B. (Rick) Hall, Professor

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### Publications since 2008

- Headlee, W.L. and **R.B. Hall**. 2015. Methods to inventory and strip thin in dense stands of aspen root suckers. *iForest - Biogeosciences and Forestry*, in press. (Accepted for publication 3/24/2015, early view on line now) *doi: 10.3832/ifor1461-008*.
- Headlee, W.L. and **R.B. Hall**. 2015. Biomass fly ash as foliar fertilizer for hybrid aspen trees: nutrient uptake, growth response, and compatibility with nitrogen fertilizer. *Journal of Plant Nutrition* 38:647-662.
- Headlee, W.L. and **R.B. Hall**. 2015. Biomass fly ash as foliar fertilizer for hybrid aspen trees: nutrient uptake, growth response, and compatibility with nitrogen fertilizer. *Journal of Plant Nutrition* 38:647-662.
- Iakovoglou, V., T.B. Parkin, **R.B. Hall** & M.K. Misra. 2014. Gas chromatograph analysis on closed nitrous oxide and air atmospheres of recalcitrant *Quercus alba* seeds, *Scandinavian Journal of Forest Research*, DOI: [10.1080/02827581.2014.915979](https://doi.org/10.1080/02827581.2014.915979).
- Headlee, W.L., C.E. Brewer, and **R.B. Hall**. 2014. Biochar as a substitute for vermiculite in potting mix for hybrid poplar. *BioEnergy Res* 7:120-131.
- Wilson D.M., E.A. Heaton, L.A. Schulte, T.P. Gunther, **R.B. Hall**, W.L. Headlee, K.J. Moore, M.E. Maier, and N.N. Boersma. 2014. Establishment and short-term productivity of annual and perennial bioenergy crops across a landscape gradient. *BioEnergy Research*, 7:885-898.
- Chendev, Yu.G., T.J. Sauer, **R.B. Hall**, A.N. Petin, L.L. Novykh, E.A. Zazdravnyih, Yu.I. Cheverdin, V.V. Tischenko, K.I. Filatov. 2013. Stock assessment and balance of organic carbon in the Eastern European forest-steppe ecosystems tree windbreaks. *Regional Environmental Issues (Russia)* 4:7-14.
- Manatt, R.K., A. Hallam, L.A. Schulte, E.A. Heaton, T. Gunther, **R.B. Hall**, and K.J. Moore. 2013. Farm-scale costs and returns for second-generation bioenergy cropping systems in the U.S. Corn Belt. *Environmental Research Letters*. 8 (2013) 035037.
- Headlee, W.L., **R.B. Hall**, and R.S. Zalesny, Jr. 2013. Establishment of alleycropped hybrid aspen "Crandon" in central Iowa, USA: Effects of topographic position and fertilizer rate on aboveground biomass production and allocation. *Sustainability* 2013, 5, 2874-2886; doi:10.3390/su5072874
- Headlee, W.L., R.S. Zalesny, Jr., D.M. Donner, and **R.B. Hall**. 2013. Using a process-based model (3-PG) to predict and map hybrid poplar biomass productivity in Minnesota and Wisconsin, USA. *BioEnergy Research* 6: 196-210.
- Headlee, W.L., R.S. Zalesny, Jr., **R.B. Hall**, E.O. Bauer, B. Birr, J.A. Randall, and A.H. Wiese. 2013. Specific gravity of hybrid poplars in the north-central region, USA: within-tree variability and site x genotype effects. *Forests* 4: 251-269.
- Mahama, A.A., **R.B. Hall**, and R.S. Zalesny, Jr. 2011. Differential interspecific incompatibility among *Populus* hybrids in sections Aigeiros DUBY and Tacamahaca Spach. *Forestry Chronicle* 87:790-796.
- Tyndall, J.C., L.A. Schulte, **R.B. Hall**, and K.R. Grubb. 2011. Woody biomass in the U.S. Cornbelt? Constraints and Opportunities in the supply from two regions. *Biomass and Bioenergy* 35:1561-1571.
- Iakovoglou, V., M.K. Misra, **R.B. Hall**, and A.D. Knapp. 2010. Alterations of seed variables under storage in nitrous oxide (N<sub>2</sub>O) atmospheres for two recalcitrant *Quercus* species. *Scand. J. For Res.* 25(Suppl. 1):24-30.
- Zalesny, J.A., R.S. Zalesny, Jr., D.R. Coyle, **R.B. Hall**, and E.O. Bauer. 2009. Clonal variation in morphology of *Populus* root systems following irrigation with landfill leachate or water during 2 years of establishment. *Bioenergy. Res.* 2:134-143.
- Zalesny, R.S., Jr., **R.B. Hall**, J.A. Zalesny, B.G. McMahan, W.E. Berguson, and G.R. Stanosz. 2009. Biomass and genotype x environment interactions of *Populus* energy crops in the midwestern United States. *Bioenergy. Res.* 2:106-122.
- Hall, R.B.** 2008. Woody bioenergy systems in the United States. In: *Biofuels, bioenergy, and bioproducts from sustainable agricultural and forest crops: proceedings of the Short Rotation Crops International Conference; August 18-22, 2008; Bloomington, MN. Gen Tech Report NRS-P-31. Newtown Square, PA; U.S. Department of Agriculture, Forest Service, Northern Research Station.* p 18.
- Zalesny, J.A., R.S. Zalesny, Jr., A.H. Wiese, B.T. Sexton, and **R.B. Hall**. 2008. Uptake of macro- and micro-nutrients into leaf, woody, and root tissue of *Populus* after irrigation with landfill leachate. *J. Sustainable Forestry* 27:303-327.
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## Mary Harris, *Adjunct Assistant Professor*

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## Thomas Isenhardt, *Professor*

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## **Robert W. Klaver, Unit Leader – U.S. Geological Survey, Iowa Cooperative Fish and Wildlife Research Unit and Professor**

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## Catherine Mabry McMullen, *Adjunct Associate Professor*

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## Peter L. Moore, *Adjunct Assistant Professor*

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## Joseph E. Morris, Center Director and Professor

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### Extension Fact Sheets/Products

- Shour, M. and **J.E. Morris**. 2011. Category 5, Aquatic Pest Control -- A Guide for Commercial Pesticide Applicators, Iowa State University Extension Publication Cs-0017, Ames, Iowa. 88 pp.



## **Cassandra M.V. Nuñez, Assistant Adjunct Professor**

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### **Publications since 2008**

- Nuñez, C.M.V.**, J.S. Adelman, D.I. Rubenstein. 2015. Sociality increases juvenile survival after a catastrophic event in the feral horse (*Equus caballus*). *Behavioral Ecology*, 26(1), 138–147.
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## Clay Pierce, Assistant Unit Leader – Iowa Cooperative Fish & Wildlife Research Unit

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- Reeves, R.A., **C.L. Pierce**, E. Muths., K.L. Smalling, R.W. Klaver, M.W. Vandever, and W.A. Battaglin. *Accepted*. Amphibian stress, survival, and habitat quality in restored agricultural wetlands in Central Iowa. Wetlands.
- Bakevich, B.D., **C.L. Pierce**, and M.C. Quist. 2015. Status of the Topeka shiner in west-central Iowa. American Midland Naturalist 174:350-358.
- Colvin, M.E., **C.L. Pierce**, and T.W. Stewart. 2015. A food web modeling analysis of a Midwestern, USA eutrophic lake dominated by non-native Common Carp and Zebra Mussels. Ecological Modeling 312:26-40.
- Smalling, K.L., R.A. Reeves, E. Muths, M.W. Vandever, W.A. Battaglin, M.L. Hladik, and **C.L. Pierce**. 2015. Pesticide concentrations in frog tissue and wetland habitats in a landscape dominated by agriculture. Science of the Total Environment 502:80-90.
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- Parks, T.P., M.C. Quist, and **C.L. Pierce**. 2014. Historical changes in fish assemblage structure in Midwestern nonwadeable rivers. American Midland Naturalist 171:27-53.
- Bakevich, B.D., **C.L. Pierce**, and M.C. Quist. 2013. Habitat, fish species, and fish assemblage associations of the Topeka shiner in west-central Iowa. North American Journal of Fisheries Management 33:1258-1268.
- Pierce, C.L.**, N.L. Ahrens, A.K. Loan-Wilsey, G.A. Simmons, and G.T. Gelwicks. 2013. Fish assemblage relationships with physical characteristics and presence of dams in three eastern Iowa rivers. River Research and Applications DOI: 10.1002/rra.2654.
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- Thomas, J.T., M.E. Culler, D.C. Dermisis, **C.L. Pierce**, A.N. Papanicolaou, T.W. Stewart, and C.J. Larson. 2011. Effects of grade control structures on fish passage, biological assemblages, and hydraulic environments in western Iowa streams: a multidisciplinary review. River Research and Applications DOI:10.1002/rra.
- Sindt, A.R., J.R. Fischer, M.C. Quist, and **C.L. Pierce**. 2011. Ictalurids in Iowa's streams and rivers: status, distribution, and relationships with biotic integrity. Pages 335-347 in *Conservation, Ecology & Management of Worldwide Catfish Populations & Habitats*. American Fisheries Society, Symposium 77, Bethesda, MD.
- Rowe, D.C., **C.L. Pierce**, and T.F. Wilton. 2009. Fish assemblage relationships with physical habitat in wadeable Iowa streams. North American Journal of Fisheries Management 29:1314-1332.
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- Koch, J.D., M.C. Quist, **C.L. Pierce**, K.A. Hansen, and M.J. Steuck. 2009. Effects of commercial harvest on shovelnose sturgeon populations in the Upper Mississippi River. North American Journal of Fisheries Management 29:84-100.
- Litvan, M.E., **C.L. Pierce**, T.W. Stewart, and C.J. Larson. 2008. Fish passage in a western Iowa stream modified by grade control structures. North American Journal of Fisheries Management 28:1384-1397.
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## **James A. Pritchard, Adjunct Associate Professor: NREM and Landscape Architecture**

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### **PUBLICATIONS**

**James Pritchard.** "A Landscape Transformed." Chapter 1 (pp. 12-43) in J.L. Anderson, ed., *The Rural Midwest Since WWII*. Dekalb: Northern Illinois University Press, 2014.

**James Pritchard.** "Irresistible Fascination: Fritiof Fryxell and the Development of Grand Teton National Park." *Annals of Wyoming* 85, No. 4 (Autumn 2013): 2-16.

**James Pritchard.** "Mountain Home, Prairie Home," *Wapsipinicon Almanac* No. 15 (December, 2008).

### **PUBLISHED BOOK REVIEWS**

Jerry Apps, *Whispers and Shadows: A Naturalist's Memoir*, for *Annals of Iowa* (Forthcoming).

Gregory J. Dehler. *The Most Defiant Devil: William Temple Hornaday and His Controversial Crusade to Save American Wildlife*, for *Annals of Iowa* 73, No. 4 (Fall 2014): 387-88.

Peter Alagona. *After the Grizzly: Endangered Species and the Politics of Place in California*, for *Environmental History* V. 19 No. 4 (October 2014): 779-781.

Karl Boyd Brooks. *Before Earth Day: The Origins of American Environmental Law*, for *Kansas History: A Journal of the Central Plains* Vol. 32, No. 4 (Winter 2009-10): 276.

Jeff Mapes. *Pedaling Revolution: How Cyclists are Changing American Cities*, in *Environmental History* Vol. 14 No. 4 (October 2009): 778.

### **REPORTS & CONTRACT HISTORIES**

"History of Desert Pupfish Restoration Efforts," for National Park Service, January 2014 to present (in progress). Supervisory role, for a post-doc.

"A Brief History of the Trails of Grand Teton National Park." July 1, 2010. White Paper for the University of Wyoming-National Park Service Research Center, Moran, Wyoming. 34 pages, plus 11 page map & photographic archive.

"The Northern Backcountry Patrol Cabins of Grand Teton National Park." April, 2009. White Paper for the University of Wyoming-National Park Service Research Center, Moran, Wyoming. 34 pages, plus photographic archive.

### **IN PREPARATION**

"RAGBRAI: the Context of a Mass Ride Through an Agrarian Landscape." For a book of essays on the environmental history of the bicycle, organized by Michael Egan, McMaster University. Oregon State University Press.

*Collected Essays of Olaus Murie*. Co-edited volume, with Mark Harvey, of North Dakota State University. Target: Grand Teton Association.

## **Jesse Randall, Associate Professor and Extension Forester**

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### **Extension publications** (\*denotes peer review process)

- Randall, J.A.** and P. Tauke. 2014. Forestry Reference Handbook. 69 Pgs. Updated and added to content. (10000 printed copies of book).
- Randall, J.A.** 2014, 2013, 2012, 2011, 2010, 2009, 2008. Firms and Individuals Providing Forestry Services in Iowa. F361.
- Randall, J. A.** 2014, 2012, 2011, 2010, 2009, 2008, 2007. Directory of Sawmills in Iowa. F-301.
- \***Randall, J.A.** and R. Harr. 2014. Fire in Grazing Management: Patch-Burn Grazing. F 2088F.
- \***Randall, J.A.** and R. Harr. 2014. Burning For Oak Regeneration. F 2088G.
- Randall, J. A.** 2014. Selecting and Maintaining your Christmas tree. F-654.
- Randall, J. A.** 2014. Growing Seedlings from Seed. F-304.
- Randall, J.A.** 2013. Chemical Control of Unwanted Shrub and Tree Vegetation. F341.
- Randall, J.A.** 2013. Managing Storm Damaged Woodlands. F371.
- Randall, J.A.** 2013. Grafting Apple Trees. F404.
- Randall, J.A.** and J. Cook. 2013. American Ginseng in Iowa: Ecology and History. F400.
- Randall, J.A.** and J. Cook. 2013. American Ginseng in Iowa: Producing. F401.
- Randall, J.A.** and J. Cook. 2013. American Ginseng in Iowa: Pest Management. F402.
- Randall, J.A.** and J. Cook. 2013. American Ginseng in Iowa: Regulations. F403.
- Randall, J.A.** and J. Herring. 2012. Management of Floodplain Forests. F361.
- Randall, J.A.** 2012. Tree Shelters for Hardwood Plantings. F364.
- Randall, J.A.** 2012. Controlling Deer Damage in Tree Plantings. F358.
- \***Randall, J.A.** and H. Frater. Revised for peer review 2012 – originally produced in 2010. Developing a Prescribed Burn Plan: Elements and Considerations (PM 2088A).
- \***Randall, J.A.** and R. Harr. 2012. Considerations for Prescribed Burning: Tools and Safety gear. (PM 2088B).
- \***Randall, J.A.**, H. Frater, and R. Harr. revised 2012. Timing Your Prescribed Burn. (PM 2088C).
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- Jesse, L., M. Windham, A. Windham, **J. Randall**, M. Shour, D. Lewis, and M. Gleason. 2011. Thousand Cankers Disease of Black Walnut. National Pest Alert – IPM.
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- Shour, M., L. Jesse, D. Lewis, J. Iles, and **J.A. Randall**. 2009. Emerald Ash Borer Management Options. ISU Extension PM 2084.
- Shour, M. and **J.A. Randall**. 2009. Suggestion for Emerald Ash Borer Community Preparation. ISU Fact Sheet, June 2009.
- Randall, J.A.** and J.A. Blanchong. 2009. Finding feral hogs in Iowa – we want to know about them!
- Randall, J.A.** and J. Blanchong. 2008. Feral Hogs in Iowa! ISU Tri-Fold fact sheet.
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### **Peer Reviewed Publications** (\* Denotes graduate student)

- Frater, H.\*, J. Blanchong, L. Bartholomay, and **J.A. Randall**. Accepted. Impact of prescribed burning on the abundance of mammalian host, *Peromyscus leucopus*, and the vector, *Ixodes scapularis* of *Borrelia burgdorferi*. *Natural Areas Journal*.
- Headlee, W.L.\*, R. Zalesny, R. Hall, E. Bauer, B. Bender, B. Birr, R. Miller, **J.A. Randall**, and A. Wiese. 2013. Specific gravity of hybrid poplars in the north-central region, USA: within-tree variability and site X Genotype effects. *Forests* 4(2),251-269.

- Randall, J.A.** and M.B. Walters. 2011. Deer density effects on vegetation and soils over site productivity and stand age gradients in aspen stands. *Forest Ecology and Management* 261:408-
- Brudvig, L.A.\* , H.M. Blunck, H. Asbjornsen, V.S. Mateos-Remigio, S.A. Wagner, A. Beringer, and **J.A. Randall**. 2011. Influences of woody encroachment and restoration thinning on savanna oak tree radial growth rates. *Forest Ecology and Management* 262: 1409-1416.

## Kevin J. Roe, Adjunct Associate Professor

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### Books, monographs and proceedings

Lang, N.J., **K.J. Roe**, C.B. Renaud, H.S. Gill, I.C. Potter, J. Freyhof, A.M. Naseka, P. Cochran, H.E. Perez, and E. Habit. 2009. Novel Relationships among Lampreys (Petromyzontiformes) Revealed by a Taxonomically Comprehensive Molecular Data Set. In: *Biology, Management, and Conservation of Lampreys in North America*. L. Brown, S. Chase, M. Mesa, R. Beamish, and P. Moyle (eds.) *American Fisheries Society Symposium*. 72.

### Papers in refereed journals

- Chong, J.P., J.L. Harris, and **K.J. Roe**. Incongruence between mtDNA and nuclear data in the freshwater mussel genus *Cyprogenia* (Bivalvia: Unionidae) and its impact on species delineation. *Molecular Ecology* (submitted)
- Roe, K.J.** and S.L. Boyer. 2015 A comparison of genetic diversity between sympatric populations of the endangered winged-mapleleaf (*Quadrula fragosa*) and the pimpleback (*Amphinaias pustulosa*) in the St. Croix River, USA. *Bulletin of the American Malacological Society*. 33(1):1-9.
- Roe, K.J.** 2013. Molecular phylogenetics and zoogeography of the freshwater mussel genus *Ptychobranthus* (Bivalvia: Unionidae). *Bulletin of the American Malacological Society*. 31(2):257-265.
- Randklev, C.R., M.S. Johnson, E.T. Tsakiris, S. Rogers-Oetker, **K.J. Roe**, J.L. Harris, S. McMurray, C. Robertson, J. Groce, and N. Wilkins. 2012. False spike, *Quadrula mitchelli* (Bivalvia: Unionidae), is not extinct: first account of a live population in over 30 years. *Bulletin of the American Malacological Society*. 30:327-328.
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- von Rintelen, K., T.J. Page, Y. Cai, **K.J. Roe**, B. Stelbrink, B.R. Kuhajda, T. Iliffe, J. Hughes, and T. von Rintelen. 2011. Drawn to the dark side: a molecular phylogeny of freshwater shrimps (Crustacea: Decapoda: Caridea: Atyidae) reveals frequent cave invasions and challenges current taxonomic hypotheses. *Molecular Phylogenetics and Evolution*. 63: 82-96.
- Bagley, J., R.L. Mayden, **K.J. Roe**, W.E. Holznagel, and P.H. Harris. 2011. Congeneric phylogeographical sampling reveals polyphyly, challenges species' limits within black basses (Centrarchidae: *Micropterus*). *Biological Journal of the Linnean Society*. 104: 346-363.
- Hemmingsen, A.H, **K.J. Roe**, and J.M. Serb. 2009. Development and characterization of eleven microsatellite markers for the endangered winged-mapleleaf, *Quadrula fragosa* (Bivalvia, Unionidae). *Molecular Ecology Resources*, vol. 9: 1460–1466.
- Roe, K.J.**, R.L. Mayden, and P.M. Harris. 2008. Systematics and zoogeography of the Rockbasses (Centrarchidae: *Ambloplites*). *Copeia*. 2008: 858-867.
- Bogan, A.E. and **K.J. Roe**. 2008. Freshwater bivalve (Unioniformes) diversity, systematics, and evolution: status and future directions. *Journal of the North American Benthological Society*. 27: 349-369.

## Ann Russell, Adjunct Associate Professor

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### Publications since 2008

- Russell, A.E.** 2014. Unexpected effects of chitin, cellulose, and lignin addition on soil dynamics in a wet tropical forest. *Ecosystems* DOI 10.1007/s10021-014-9769-1.
- Weintraub, S.R., **A.E. Russell**, and A.R. Townsend. 2014. Native tree species regulate nitrous oxide fluxes in tropical plantations. *Ecological Applications* 24(4), 750-758.
- Jagadamma, S., M.A. Mayes, Y.L. Zinn, G. Gísladóttir, and **A.E. Russell**. 2013. Sorption of organic carbon compounds to the fine fraction of surface and subsurface soils. *Geoderma* 213: 79–86.
- Russell, A.E.** and J.W. Raich. 2012. Rapidly growing tropical trees mobilize remarkable amounts of nitrogen, in ways that differ surprisingly among species. *Proceedings of the National Academy of Science*.  
[www.pnas.org/cgi/doi/10.1073/pnas.1204157109](http://www.pnas.org/cgi/doi/10.1073/pnas.1204157109)
- Russell, A.** 2012. Rainforest carbon cycling and biodiversity: A simulation model learning tool. EcoEd Digital Library, <http://esa.org/ecoed/index.php?P=FullRecord&ID=429>.
- Saatchi, S., M. Marlier, R.L. Chazdon, D.B. Clark, and **A.E. Russell**. 2011. Impact of spatial variability of tropical forest structure on radar estimation of aboveground. *Remote Sensing of Environment*, Special Issue: VEG3D. doi:10.1016/j.rse.2010.07.015
- Russell, A.E.**, J.W. Raich, R. Bedoya, O. Valverde-Barrantes, and E. González. 2010. Impacts of individual tree species on carbon dynamics in a moist tropical forest environment. *Ecological Applications* 20(4): 1087-1100.
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- Russell, A.E.**, J.W. Raich, R. Bedoya, O. Valverde-Barrantes, and E. González. 2010. Carbon dynamics in the tropics. *Bulletin of the Ecological Society of America*: Vol. 91, No. 2, pp. 224-225. doi: 10.1890/0012-9623-91.2.224.
- Russell, A.E.**, J.W. Raich, R. Bedoya, O. Valverde-Barrantes, and E. González. 2010. La reforestación como medida de mitigación ante el cambio climático. *Ambientico* 205: 12-14. ISSN 1490-214x.
- Raich, J.W., **A.E. Russell**, and O. Valverde-Barrantes. 2009. Fine root decay rates vary widely among lowland tropical tree species. *Oecologia* 161: 325-330. DOI: 10.1007/s00442-009-1379-9.
- Russell, A.E.**, C.A. Cambardella, D.A. Laird, D.B. Jaynes, and D.W. Meek. 2009. Nitrogen fertilizer effects on soil carbon balances in Midwestern U.S. agricultural systems. *Ecological Applications* 19(5):1102-1113.

## Lisa Schulte Moore, Associate Professor

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### Peer-Reviewed Journal Article since 2008

- Ontl, T.A., C.A. Cambardella, **L.A. Schulte**, and R.K. Kolka. 2015. Factors influencing aggregation and particulate organic matter responses to bioenergy crops across a topographic gradient. *Geoderma* 255-256:1-11.
- McGranahan, D., P.W. Brown, **L.A. Schulte**, and J.C. Tyndall. 2015. Associating conservation/production patterns in U.S. farm policy with agricultural land-use in three Iowa, USA townships, 1933-2002. *Land Use Policy* 45:76-85.
- Knoot, T.G., M.E. Shea, **L.A. Schulte**, J.C. Tyndall, M. Nelson, C. Perry, B. Palik, and L. Westphal. 2015. Forest change in the Driftless Area of the Midwest: from a preferred to undesirable future? *Forest Ecology and Management* 341:110-120.
- Liebman, M.Z. and **L.A. Schulte**. 2015. Enhancing agroecosystem performance and resilience through increased diversification of landscape and cropping systems. *Elementa*: <http://elementascience.org/article/info:doi/10.12952/journal.elementa.000041> DOI 10.12952/journal.elementa.000041.
- Asbjornsen, H., V. Hernandez-Santana, M. Liebman, J. Bayala, J. Chen, M. Helmers, C.K. Ong, and **L.A. Schulte**. 2014. Targeting perennial vegetation in agricultural landscapes for enhancing ecosystem services. *Renewable Agriculture and Food Systems* 29:101-125. doi:10.1017/S1742170512000385.
- Cox, R., M. O'Neal, R. Hessel, **L.A. Schulte**, and M. Helmers. 2014. The impact of prairie strips on aphidophagous predator abundance and soybean aphid predation in agricultural catchments. *Environmental Entomology* 43:1185-1197.
- Shea, M.E., **L.A. Schulte**, and B.J. Palik. 2014. Reconstructing vegetation past: pre-Euro-American vegetation for the Midwest Driftless Area, USA. *Ecological Restoration* 32:417-433.
- Wilson, D.M., E.A. Heaton, **L.A. Schulte**, T.P. Gunther, M.E. Shea, R.B. Hall, W.L. Headlee, K.J. Moore, and N.N. Boersma. 2014. Establishment and short-term productivity of annual and perennial bioenergy crops across a landscape gradient. *BioEnergy Research* 7:885-898. DOI 10.1007/s12155-014-9409-9.
- Heaton, E., **L.A. Schulte**, M. Berti, H. Langeveld, W. Zegada-Lizarazu, D. Parrish, and A. Monti. 2013. Managing a second-generation crop portfolio through sustainable intensification: examples from the USA and the EU. *Biofuels, Bioproducts & Biorefining* 7:702-714. DOI: 10.1002/bbb.1429 (*Invited paper*)
- Hirsh, S.M., C.M. Mabry, **L.A. Schulte**, and M. Liebman. 2013. Diversifying agricultural catchments by incorporating prairie buffer strips. *Ecological Restoration* 31:201-211.
- Jordan, N., **L.A. Schulte**, C. Williams, D. Mulla, D. Pitt, C. Schively-Slotterback, R. Jackson, D. Landis, B. Dale, D. Becker, M. Rickenbach, M. Helmers, and R. Bringi. 2013. Landlabs: an integrated approach to creating agricultural enterprises that meet the triple bottom line. *Journal of Higher Education Outreach and Engagement* 17:175-200.
- Liebman, M.Z., M.J. Helmers, **L.A. Schulte**, and C. Chase. 2013. Using biodiversity to link agricultural productivity with environmental quality: results from three field experiments in Iowa. *Renewable Agriculture and Food Systems* 28:115-128. doi:10.1017/S1742170512000300.
- Manatt, R.K., A. Hallam, **L.A. Schulte**, E.A. Heaton, T. Gunther, R.B. Hall, and K.J. Moore. In press. Farm-scale costs and returns for second-generation bioenergy cropping systems in the U.S. Corn Belt. *Environmental Research Letters* 8: 035037. doi:10.1088/1748-9326/8/3/035037. (*Invited paper*)
- Ontl, T.A., K.S. Hofmockel, C.A. Cambardella, **L.A. Schulte**, and R.K. Kolka. 2013. Topographic and soil influences on root productivity of three bioenergy cropping systems. *New Phytologist* 199: 727-737.
- Tyndall, J., **L.A. Schulte**, M. Liebman, and M. Helmers. 2013. Field-level financial assessment of contour prairie strips for enhancement of environmental quality. *Environmental Management* 52:736-747.
- Corace, R.G., III, L.M. Shartell, **L.A. Schulte**, W.L. Brininger, Jr., M.K.D. McDowell, and D.M. Kashian. 2012. An ecoregional context for forest management on National Wildlife Refuges of the Upper Midwest, USA. *Environmental Management* 49:359-371.
- Atwell, R.C., **L.A. Schulte** 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* 16:10. [online] URL: <http://www.ecologyandsociety.org/vol16/iss1/art10/>
- Brown, P.W. and **L.A. Schulte**. 2011. Agricultural landscape change (1937-2002) in three townships in Iowa, USA. *Landscape and Urban Planning* 100:202-212.
- Liu, F., D.J. Mladenoff, N.S. Keuler, and **L. Schulte Moore**. 2011. Broad-scale variability in the historic land survey records in Wisconsin (USA) and its consequences for ecological studies. *Ecological Monographs* 81:295-275.
- Schmidt, N., M. O'Neal, and **L.A. Schulte Moore**. 2011. Effects of grassland habitat and plant nutrients on soybean aphid



and natural enemy populations. *Environmental Entomology* 40:260-272.

- Schulte, L.A.**, E.C. Mottl, and B.J. Palik. 2011. The association of two invasive shrubs, common buckthorn (*Rhamnus cathartica*) and Tartarian honeysuckle (*Lonicera tatarica*), with oak communities in the Midwestern U.S. *Canadian Journal of Forest Research* 41:1981-1992.
- Tyndall, J.C., **L.A. Schulte**, and R.B. Hall. 2011. Expanding the US Cornbelt biomass portfolio: forester perceptions of the potential for woody biomass. *Small-scale Forestry* 35:1561-1571. DOI 10.1007/s11842-010-9149-4.
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- Berges, S.A., **L.A. Schulte**, T.M. Isenhardt, and R.C. Schultz. 2010. Bird species diversity in riparian buffers, row crop fields, and grazed pastures within agriculturally dominated watersheds. *Agroforestry Systems* 79:97-110. (DOI 10.1007/s10457-009-9270-6)
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- Knot, T.G., **L.A. Schulte**, and M. Rickenbach. 2010. Oak conservation on private forestlands: negotiating a complex socio-ecological landscape. *Environmental Management* 45:155-164. (published online in 2009: DOI 10.1007/s00267-009-9404-7).
- Atwell, R.C., **L.A. Schulte**, and L.M. Westphal. 2009. Landscape, community, and countryside: linking biophysical and social scales in U.S. Corn Belt conservation initiatives. *Landscape Ecology* 24:791-806.
- Atwell, R.C., **L.A. Schulte**, and L.M. Westphal. 2009. Linking resilience and diffusions of innovations to restore perennial cover in the U.S. Corn Belt. *Ecology and Society* 14:30. [online] URL: <http://www.ecologyandsociety.org/vol14/iss1/art30>
- Dettman, C.L., C.M. McMullen, **L.A. Schulte**. 2009. Restoration of midwestern U.S. savannas: one size does not fit all. *Restoration Ecology* 17:772-783. (published online in 2008: doi 10.1111/j.1526-100X.2008.00413.x.)
- Gass, R.J., M. Rickenbach, **L.A. Schulte**, and K. Zeuli. 2009. Cross-boundary coordination on forested landscapes: investigating alternatives for implementation. *Environmental Management* 43:107-117.
- Knot, T.G., **L.A. Schulte**, N. Grudens-Schuck, and M. Rickenbach. 2009. The changing social landscape in the Midwest: A boon for forestry and bust for oak? *Journal of Forestry* 107:260-270.
- Lang, K.D., **L.A. Schulte**, and G.R. Guntenspergen. 2009. Forest dynamics in mesic northern hardwoods following windthrow and salvage logging. *Forest Ecology and Management* 259:56-64.
- Rayburn, A.P. and **L.A. Schulte**. 2009. Integrating historic and contemporary data to delineate remnant natural areas within agricultural landscapes. *Natural Areas Journal* 24:4-14.
- Rayburn, A.P. and **L.A. Schulte**. 2009. Landscape change in an agricultural watershed in the U.S. Midwest. *Landscape and Urban Planning* 93:132-141.
- Atwell, R.C., **L.A. Schulte**, and B.J. Palik. 2008. Songbird response to experimental retention harvesting in red pine (*Pinus resinosa*) forests. *Forest Ecology and Management* 255:3621-3631.
- Keane, R.E., J.K. Agee, P. Fulé, J.E. Keeley, C. Key, S.G. Kitchen, R. Miller, and **L.A. Schulte**. 2008. Ecological effects of large fires on US landscapes: benefit or catastrophe? *International Journal of Wildland Fire* 17:696-712. (*Authors after lead authors listed in alphabetical order*)
- Schulte, L.A.**, M. Rickenbach, and L.C. Merrick. 2008. Ecological and economic benefits of cross-boundary coordination among private forest owners. *Landscape Ecology* 23:481-496.

### Other Peer-Reviewed Articles

- Farnsworth, D., **L.A. Schulte**, and S. Hickey. 2012. Evaluation of current and alternative spatial patterns of grassland in the Loess Hills. Pages 8 - 17 in the Proceedings of the 22nd North American Prairie Conference.
- Ontl, T.A.\* and **L.A. Schulte**. 2012. Soil carbon storage. *Nature Education* 3(7):22. \*Ph.D. student. [My contribution: 5% concept; NA analysis; 15% writing and editing]. Significance: This paper provides a primer on soil carbon storage. Soils are the largest terrestrial pool of carbon, so their management has huge potential impacts on global climate change.
- Liebman, M., M.J. Helmers, and **L.A. Schulte**. 2010. Integrating conservation with biofuel feedstock production. Pages 131-142 in: P. Nowak and M. Schnepf (eds.), *Managing Agricultural Landscapes for Environmental Quality II: Achieving More Effective Conservation*. Soil and Water Conservation Society, Ankeny, Iowa.

- Mladenoff, D.J., **L.A. Schulte**, and J. Bolliger. 2008. Broad-scale change in the northern forests: from past to present. Chapter 5 in Waller, D., and T. Rooney, editors. *The vanishing present: Wisconsin's changing lands, waters, and wildlife*. University of Chicago Press, Chicago, IL.
- Moser, W.K., J. Bolliger, D.C. Bragg, M.H. Hansen, M.A. Hatfield, T.A. Nigh, and **L.A. Schulte**. 2008. Tools for understanding landscapes: combining large-scale surveys with other information to characterize change. Chapter 10 in Laforteza, R., J. Chen, G. Sanesi, T. Crow, editors. *Patterns and processes in forest landscapes: multiple use and sustainable management*. Springer, New York, NY.
- Schulte, L.A.**, H. Asbjornsen, R. Atwell, C. Hart, M. Helmers, T. Isenhardt, R. Kolka, M. Liebman, J. Neal, M. O'Neal, R. Schultz, S. Secchi, J. Thompson, M. Tomer, and J. Tyndall. 2008. Targeted conservation approaches for improving environmental quality: multiple benefits for expanded opportunities. PMR 1002. Iowa State University Extension, Ames, IA.

### **Editorially-Reviewed Research Publications**

- Larsen, G.L.D., **L.A. Schulte**, and J.C. Tyndall. 2015. How should Iowa's agricultural landscape look? *Rootstalk* 1:41-46. (*Invited*)
- Enloe, S., **L.A. Schulte**, and J.C. Tyndall. 2014. Fostering collaborative watershed management: lessons learned from the Boone River Watershed, Iowa. *Journal of Soil and Water Conservation* 69: 149A-153A.
- Knot, T.G., G.L. D. Larsen, and **L.A. Schulte**. 2014. So you need a social monitoring plan: now what? *Journal of Soil and Water Conservation* 69:84A-88A.
- Schulte Moore, L.** 2014. Prairie strips: bringing biodiversity, improved water quality, and soil protection to agriculture. *Missouri Prairie Journal* 35:12-15. (*Invited*)
- Heaton E.A., **L.A. Schulte Moore**, M. Helmers, M. Liebman, and F. Milster. 2013 Producing food, feed and energy: how can agriculture do it all? Proceedings of the 25<sup>th</sup> Annual Integrated Crop Management Conference, pp. 33-47. Iowa State University, Ames, IA.
- McGranahan, D.A., P.W. Brown, **L.A. Schulte**, and J. Tyndall. 2013. A historical primer on the U.S. farm bill: Supply management and conservation policy. *Journal of Soil and Water Conservation*: In press.
- Schulte, L.A.**, T.A. Ontl, and G.L.D. Larsen. 2013. Biofuels and Biodiversity, Wildlife Habitat Restoration. In: Levin S.A. (ed.) *Encyclopedia of Biodiversity*, second edition, Volume 1, pp. 540-551. Waltham, MA: Academic Press. (*Chapter invited by Associate Editor David Tilman*)
- Schulte, L.A.** 2012. Reinforcing our foundations in oak. *Wisconsin Natural Resources Magazine*. June: 14-17.
- Rickenbach, M.G., **L.A. Schulte**, D.B. Kittredge, W.G. Labich, and D.J. Shinneman. 2011. Cross-boundary cooperation: a mechanism for sustaining ecosystem goods and services from private lands. *Journal of Soil and Water Conservation* 66:91A-96A; doi:10.2489/jswc.66.4.91A.
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- Rickenbach, M. and **L. Schulte**. 2008. Cross-boundary coordination: working across tiny boxes. *Blue Mounds Area Project Newsletter* 11(1):4-5.
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- Schulte, L.A.** and M. Rickenbach. 2008. Meeting landscape management objectives on private lands. *BetterFORESTS* IX(3):18-19.
- Secchi, S., J. Tyndall, **L.A. Schulte**, and H. Asbjornsen. 2008. High crop prices and conservation: raising the stakes. *Journal of Soil and Water Conservation* 63:68A-73A.

## Richard Schultz, *University Professor*

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### Refereed Papers since 2008

- Zaimes, G.N. and **R.C. Schultz**. 2015. Riparian Land-use Impacts on Bank Erosion and Deposition of an Incised Stream in Central Iowa, USA. *Catena* 125: 61-73.
- Palmer, Jason, Keith E. Schilling, Thomas M. Isenhardt, **Richard C. Schultz**, Mark D. Tomer. 2013. Streambank erosion rates and loads within a single watershed: Bridging the gap between temporal and spatial scales. *Geomorphology* 209:66-78.
- Zaimes, G.N. and **R.C. Schultz**. 2012. Assessing Riparian Conservation Land Management Practice Impacts on Gully Erosion in Iowa. *Environmental Management* 49:1009-1021.
- Tufekcioglu, M., T.M. Isenhardt, J. Russell, and **R. Schultz**. 2012. Stream bank erosion as a source of sediment and phosphorus in grazed pastures of the Rathbun Lake Watershed in southern Iowa, USA. *Journal of Soil and Water Conservation* 67: 545-555.
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- Willett, C.D., R.N. Lerch, **R.C. Schultz**, S.A. Berges, R.D. Peacher, and T.M. Isenhardt. 2012. Streambank Erosion in Two Watersheds of the Central Claypan Region of Missouri, USA. *Journal of Soil and Water Conservation*.
- Zaimes, G.N., K.H. Lee, M. Tufekcioglu, L.A. Long, **R.C. Schultz**, and T.M. Isenhardt. 2012 Chapter 3: The effectiveness of riparian conservation practices in reducing sediment in Iowa Streams. In: Hendriks, B. (ED) *Agricultural Research Updates – Vol. 2: 117-165*, Nova Science Publishers, Inc.
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## Timothy Stewart, Associate Professor

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### Publications since 2008

- Wu, J., **T.W. Stewart**, J.R. Thompson, R. Kolka, and K. Franz. In press. Watershed features and stream water quality: a causal analysis of linkages in a Midwest urban landscape, U.S.A. *Landscape and Urban Planning*.
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- Stewart, T.W.** and J. Downing. 2008. Macroinvertebrate communities and environmental conditions in recently constructed wetlands. *Wetlands* 28:141-150.
- Litvan, M.E., C.L. Pierce, **T.W. Stewart**, and C.J. Larson. 2008. Fish passage in a western Iowa stream modified by grade control structures. *North American Journal of Fisheries Management* 28:1384-1397.
- Litvan, M.E., C.L. Pierce, **T.W. Stewart**, and C.J. Larson. 2008. Fish assemblage structure in a western Iowa stream modified by grade control structures. *North American Journal of Fisheries Management* 28:1398-1413.

## Jan R. Thompson, Professor

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### Research Publications Since Previous Review (2008)

- Wu, J., T. Stewart, **J. Thompson**, R. Kolka, and K. Franz. 2015 (in press). Watershed features and stream water quality: Gaining insight through path analysis in a Midwest urban landscape, U.S.A. *Landscape and Urban Planning*.
- Olson, A.R., T. Stewart, and **J. Thompson**. 2015 (in press). Direct and indirect effects of human population density and land use on physical features and invertebrates of Iowa (U.S.A.) streams. *Urban Ecosystems*.
- Hess, G., C. Moorman, **J. Thompson**, and C. Larson. 2014. Integrating wildlife conservation in urban planning. Pp. 239-278 In McCleery, R. et al. (eds.), *Urban Wildlife Conservation: Theory and Practice*. Springer Science+Business Media LLC.
- Gerken Golay, M., P. Bice, and **J. Thompson**. 2014. Collaborative learning about forest understory restoration: Identifying goals and sharing knowledge. *Journal of Forestry* 112(4): 327-336.
- Wu, J.W. and **J. Thompson**. 2013. Quantifying impervious surface changes using time-series planimetric data from 1940 to 2011 in four central Iowa cities, U.S.A. *Landscape and Urban Planning* 120: 34-47.
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- Gerken Golay, M., **J. Thompson**, C. Mabry, and R. Kolka. 2013. An investigation of water nutrient levels associated with forest vegetation in highly altered landscapes. *Journal of Soil and Water Conservation* 68(5): 361-371.
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- Widrechner, M., E. Kapler, P. Dixon, and **J. Thompson**. 2013. The importance of geographic & biological variables to predict naturalization of non-native woody plants in the Midwest. *Journal of Environmental Horticulture* 31(2): 124-131.
- Bowman, T., **J. Thompson**, and J. Tyndall. 2012. Resident, developer, and city staff perceptions of LID and CSD subdivision design approaches. *Landscape and Urban Planning* 107: 43-54.
- Kapler, E., **J. Thompson**, and M. Widrechner. 2012. Assessing stakeholder perspectives on invasive plants to inform risk analysis. *Invasive Plant Science and Management* 5(2):194-208.
- Bowman, T., J. Tyndall, **J. Thompson**, J. Kliebenstein, and J. Colletti. 2012. Multiple approaches to valuation of conservation and low-impact development features in residential subdivisions. *Journal of Environmental Management* 104:101-113.
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- Bowman, T., **J. Thompson**, J. Tyndall, and P. Anderson. 2012. Land cover analysis for urban foresters and municipal planners: Examples from Iowa. *Journal of Forestry* 110: 25-33.
- Herringshaw, C., T. Stewart, **J. Thompson**, and P. Anderson. 2011. Land use, stream habitat, and benthic invertebrate assemblages in a highly altered Iowa watershed. *American Midland Naturalist* 165:274-293.
- Gerken, M., **J. Thompson**, and C. Mabry. 2010. Restoring nutrient capture in forest herbaceous layers of the Midwest. *Ecological Restoration* 28:14-17.
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- Bowman, T., **J. Thompson**, and J. Colletti. 2009. Valuation of open spaces and conservation features in residential subdivisions. *Journal of Environmental Management* 90:321-330.
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- Adrizal, A., P. Patterson, R. Hulet, R. Bates, D. Despot, E. Wheeler, P. Topper, D. Anderson, and **J. Thompson**. 2008. The potential to trap emissions from laying hens: Ammonia and dust. *Journal of Applied Poultry Research* 17:398-411.
- Mabry, C., M. Gerken, and **J. Thompson**. 2008. Seasonal storage of nutrients by perennial herbaceous species in undisturbed versus disturbed deciduous hardwood forests. *Applied Vegetation Science* 11:35-42.
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## John Tyndall, Associate Professor

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### Publications since 2008 (\* indicates active students; \*\* indicates former students)

- Roesch, G.E.\*, S. Rabotyagov, **J.C. Tyndall**, G. Ettl, and S. Toth. (Forthcoming) Auctioning the Forest: A qualitative approach to exploring stakeholder responses to building on forest ecosystem services. *Journal of Small Scale Forestry*.
- Doudna, J.\*\*\*, M. O'Neal, **J.C. Tyndall**, and M. Helmers. (Forthcoming) Perspectives of extension agents and farmers toward an ecosystem service paradigm in the United States Corn Belt. *Journal of Extension*.
- Prokopy L., J.G. Arbuckle, A.P. Barnes, V.R. Haden, A. Hogan, M.T. Niles, and **J.C. Tyndall**. 2015. Farmers and Climate Change: A Cross-National Comparison of Beliefs and Risk Perceptions in High Income Countries. *Environmental Management*.
- Tyndall J.C.**, J.G. Arbuckle, Jr., L. Wright Morton, L. Stalker Prokopy, T. Haigh, T. Knoot, C. Knutson, and M. Widhalm. 2015. New Atlas features Corn Belt farmers' perspectives in agriculture and climate. Submitted to the *Journal of Extension* (Tools of the Trade section).
- Knoot, T.G., M.E. Shea, L.A. Schulte, **J.C. Tyndall**, M.D. Nelson, C.H. Perry, and B.J. Palik. 2015. Forest change in the Driftless Area of the Midwest: From a preferred to undesirable future. *Forest Ecology and Management*. 341: 110-120.
- McGranahan, D.\*\*\*, P. Brown, L. Schulte, and **J.C. Tyndall**. 2015. Associating conservation/production patterns in U.S. farm policy with agricultural land-use in three Iowa townships, 1933-2002. *Land Use Policy*. 45: 76-85.
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- Arbuckle, J., J. Hobbs\*, A. Loy\*, L. Wright-Morton, L. Prokopy, and **J.C. Tyndall**. 2014. Understanding farmer perspectives on climate change: Toward effective communication strategies for adaptation and mitigation in the Corn Belt. *Journal of Soil and Water Conservation*. 69 (6): 505-516.
- Enloe, S.\*\*\*, L.A. Schulte, and **J.C. Tyndall**. 2014. Toward a collaborative approach to watershed management: Lessons learned from the Boone River watershed, Iowa. *Journal of Soil and Water Conservation*. 69 (5): 149A-153A.
- Christianson, L.\*\*\*, **J.C. Tyndall**, and M. Helmers. 2013. Financial Comparison of Seven Nitrate Reduction Strategies for Midwestern Agricultural Drainage. *Water Resources & Economics*. <http://dx.doi.org/10.1016/j.wre.2013.09.001>
- Christianson, L.\*\*\*, T. Knoot, D. Larsen\*\*, **J.C. Tyndall**, and M. Helmers. 2013. An ecosystem services approach to farmer adoption of potential drainage water quality improvement strategies. *International Journal of Sustainable Agriculture*. <http://dx.doi.org/10.1080/14735903.2013.835604>
- Tyndall, J.C.**, L. Schulte, M. Liebman, and M. Helmers. 2013. Field-Level Financial Assessment of Contour Prairie Strips for Environmental Quality Enhancement. *Environmental Management*. 52(3): 736-747.
- McGranahan, D.\*\*\*, P. Brown, L. Schulte, and **J.C. Tyndall**. 2013. A historical primer on the U.S. farm bill: Supply management and conservation policy *Journal of Soil and Water Conservation*. 68 (3), 67A-73A.
- Arbuckle, J., L. Prokopy, (10 authors including five students\*) and **J.C. Tyndall**. 2013. Climate Change Beliefs, Risk Perceptions, and Attitudes toward Adaptation and Mitigation among Farmers in the Midwestern United States. *Climate Change Letters*. 117(4): 943-950.
- Tyndall, J.C.** and G.L.D. Larsen\*\*. 2013. Vegetative Environmental Buffers for Odor Mitigation. Pork Information Gateway. - US Pork Center of Excellence. PIG 10-2-15. (peer reviewed Extension).
- Grala, R., **J.C. Tyndall**, and C.W. Mize. 2012. Iowa Citizen Willingness to Pay for In-Field Windbreaks. *Landscape and Urban Planning*. 108 (2-4): 71-78.
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- Bowman, T.\* , J. Thompson, and **J.C. Tyndall**. 2012. Resident, Developer, and Civic Official Perceptions of Alternative Subdivision Design Approaches. *Landscape and Urban Planning*. 107: 43-54.
- Hernandez, G., S. Trabue, T. Sauer, R. Pfeiffer, and **J.C. Tyndall**. 2012. Odor mitigation with tree buffers: swine production case study. *Agriculture, Ecosystem & Environment* 149:154-163.
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- Tyndall, J.C.**, L. Schulte, R. Hall, and K. Gruhb\*. 2011. Woody Biomass in the U.S. Cornbelt? Constraints and Opportunities in the Supply from Two Regions. *Biomass and Bioenergy*. 35:1561-1571.
- Tyndall, J.C.**, E. Berg\*, and J.P. Colletti. 2011. Corn Stover as a Dedicated Feedstock in Iowa's Bio-economy: An Iowa Farmer Survey. *Biomass and Bioenergy*. 35:1485-1495.
- Tyndall, J.C.**, L. Schulte, and R. Hall. 2010. Potential of Woody Biomass in the U.S. Cornbelt: Opinions of Professional Foresters. *Small Scale Forestry*. 10(3): 287-303.
- Tyndall, J.C.**, S. Hoff, and J. Harmon. 2010. User Assessment of the CAM Livestock Production Siting Model. *Applied Engineering in Agriculture*. 26(5): 927-933.
- Grala, R.K., **J.C. Tyndall**, and C.W. Mize. 2010. Impact of field windbreaks on visual appearance of agricultural lands. *Agroforestry Systems* 80(3): 411-422.
- Knot, T. \*, L. Schulte, **J.C. Tyndall**, and B. Palik. 2010. The state, resilience, and potential future of disturbance-dependent oak forests as perceived by regional change agents. *Ecology & Society*. 15(4): 5.
- Schulte, L.A., J. Donahey\*\*, L. Gran\*\*, T. Isenhardt, and **J.C. Tyndall**. 2010. People in Ecosystems/Watershed Integration (PE/WI): a dynamic watershed tool for linking agroecosystem outputs to land use and land cover. *Journal of Soil and Water Conservation*. 65(2): 33A-36A.
- Tyndall, J.C.** and R.C. Grala. 2010. Financial Feasibility of Using Shelterbelts for Swine Odor Mitigation. *Agroforestry Systems* 76:237-250.
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- Brandle, J.R., L. Hodges, **J.C. Tyndall**, and R.A. Sudmeyer. 2009. Windbreak Practices. *North American Agroforestry: An Integrated Science and Practice* – Second edition. American Society of Agronomy, Inc. Madison, WI.
- Trabue, S.L., T.J. Sauer, R.L. Pfeiffer, G. Hernandez Ramirez\*, and **J.C. Tyndall**. 2009. Odor Mitigation with Tree Buffers: Swine Production Case Study. In: Proceedings of the 3rd International Congress on Biotechniques for Air Pollution Control, September 28-30, 2009, Delft, Netherlands. p. 296-299. (peer-reviewed)
- Secchi, S., **J.C. Tyndall**, L. Schulte, and H. Asbjornsen. 2008. High Crop Prices and Conservation: Raising the Stakes. *Journal of Soil and Water Conservation* V. 63, Number 3. pp 68-75.
- Schulte, L., et al., (14 authors; **J.C. Tyndall**). 2008. A targeted conservation approach for improving environmental quality: Multiple benefits and expanded opportunities. Iowa State University Agriculture and Natural Resource Extension – PMR 1002 December 2008.
- Tyndall, J.C.** and J.P. Colletti. 2008. Mitigating Swine Odor with Strategically Designed Shelterbelt Systems: A Review. *Agroforestry Systems*. 69(1):45-65.

## Michael J. Weber, Assistant Professor

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### Publications since 2008

- Weber, M.J.**, B. Ruebush, S.M. Creque, R.A. Redman, J.M. Dettmers, and S.J. Czesny. 2015. Early life history of alewife *Alosa pseudoharengus* in southwestern Lake Michigan. *Journal of Great Lakes Research*. 41:436-447.
- Weber, M.J.**, M.L. Brown, D.H. Wahl, and D.E. Shoup. 2015. Metabolic theory explains latitudinal variation in common carp populations and predicts responses to climate change. *Ecosphere* 6:54.
- Bajer, P., T.K. Cross, J. Lechelt, C.J. Chizinski, **M.J. Weber**, and P.W. Sorensen. 2015. Across-ecoregion analysis suggests a hierarchy of ecological filters that regulate recruitment of a globally invasive fish. *Diversity and Distributions* 21:500-510.
- Wagner, C., **M.J. Weber**, and D.H. Wahl. 2015. Effect of branching complexity on use of woody habitat by juvenile muskellunge. *North American Journal of Fisheries Management* 35:14-19.
- Weber, M.J.**, and M.L. Brown. 2015. Biomass-dependent effects of juvenile common carp on aquatic ecosystems. *Hydrobiologia* 742:71-80.
- Flammang, M., M. Thul, **M.J. Weber**, and R. Schultz. 2014. Laboratory evaluation of a bioacoustic bubble strobe light barrier for reducing walleye escapement. *North American Journal of Fisheries Management* 34:1047-1054.
- Howell, J.M., **M.J. Weber**, and M.L. Brown. 2014. Evaluation of trophic niche overlap between native fishes and young-of-the-year common carp. *American Midland Naturalist* 172: 91-106.
- Weber, M.J.** and M.L. Brown. 2013. Spatiotemporal variation of juvenile common carp foraging patterns as inferred from stable isotope analysis. *Transactions of the American Fisheries Society* 142:1179-1191.
- Weber, M.J.**, M. Flammang, and R. Schultz. 2013. Estimating and evaluating mechanisms related to walleye escapement from Rathbun Lake, Iowa. *North American Journal of Fisheries Management* 33:642-651.
- Weber, M. J.** and M.L. Brown. 2013. Continuous, pulsed, and disrupted nutrient subsidy effects on ecosystem productivity, stability, and energy flow. *Ecosphere* 4:27.
- Weber, M.J.** and M.L. Brown. 2013. Density-dependence and environmental conditions regulate recruitment and first year-growth of common carp in shallow lakes. *Transactions of the American Fisheries Society* 142:471-482.
- Weber, M.J.** and M.L. Brown. 2012. Maternal effect of common carp on egg quantity and quality. *Journal of Freshwater Ecology* 27:409-417.
- Weber, M.J.** and M.L. Brown. 2012. Diel and temporal habitat use of juvenile fishes in a complex glacial lake. *Lake and Reservoir Management* 28:120-129.
- Carter, M.W., **M.J. Weber**, J.M. Dettmers, and D.H. Wahl. 2012. Movement patterns of smallmouth and largemouth bass in Lake Michigan: the importance of water temperature. *Journal of Great Lakes Research* 38:396-401.
- Weber, M. J.** and M.L. Brown. 2012. Effects of predator species, vegetation and prey assemblage on prey preferences of predators with emphasis on vulnerability of age-0 common carp. *Fisheries Management and Ecology* 19:293-300.
- Weber, M.J.**, K.D. Rounds, and M.L. Brown. 2012. Phenotypic variation and associated predation risk of juvenile common carp *Cyprinus carpio*. *Journal of Fish Biology* 80:49-60.
- Redman, R.A., S.J. Czesny, J.M. Dettmers, **M.J. Weber**, and D. Makoaskas. 2011. Old tales in recent context: current perspective on yellow perch recruitment in Lake Michigan. *Transactions of the American Fisheries Society* 140:1277-1289.
- Weber, M.J.**, J.M. Dettmers, and D.H. Wahl. 2011. Growth and survival of age-0 yellow perch across habitats in southwestern Lake Michigan: early life history in a large freshwater environment. *Transactions of the American Fisheries Society* 140:1172-1185.
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- Weber, M.J.** and M.L. Brown. 2011. Comparison of common carp (*Cyprinus carpio*) age estimates derived from dorsal spines and pectoral fin rays. *Journal of Freshwater Ecology* 26:195-202.
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- Weber, M.J.**, M.J. Hennen, and M.L. Brown. 2011. Simulated population responses of common carp to commercial exploitation. *North American Journal of Fisheries Management* 31:269-279.



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- Weber, M.J.**, J.M. Dettmers, D.H. Wahl, and S.J. Czesny. 2010. Effects of predator-prey interactions and benthic habitat complexity on selectivity of a foraging generalist. *Transactions of the American Fisheries Society* 139:1004-1013.
- Weber, M.J.** and M.L. Brown. 2009. Effects of common carp on aquatic ecosystems 80 years after 'Carp as a dominant': Ecological insights for fisheries management. *Reviews in Fisheries Science* 17:524-537.

## Peter T. Wolter, Assistant Professor

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### Refereed Journal Articles since 2008

- Wolter, P.T.**, E. Berkley, S. Peckum, and P.A. Townsend. (in prep.). Monitoring oak savanna restoration efforts in central Minnesota using multi-temporal Landsat data. *Journal of Fish and Wildlife Management*.
- Sturtevant, B.R., B.R. Miranda, D.J. Shinneman, E.J. Gustafson, and **P.T. Wolter**. Submitted. Comparing contemporary and presettlement forest dynamics in the Boundary Waters Canoe Area Wilderness (USA) – Does spruce budworm disturbance enhance fire risk? *Ecological Applications*.
- James, P.M.A., B.R. Sturtevant, P.A. Townsend, **P.T. Wolter**, and M-J. Fortin. Accepted. Spatial legacies of forest management in spruce budworm host tree species in the Border Lakes Landscape. *Ecological Applications*.
- Wolter, P.T.** and P.A. Townsend. 2011. Estimating forest species composition using a multi-sensor fusion approach. *Remote Sensing of Environment*, 115, 671–691.
- Wolter, P.T.**, P.A. Townsend, and B.R. Sturtevant. 2009. Estimation of forest structural parameters using 5 and 10 meter SPOT-5 satellite data. *Remote Sensing of Environment*, 113, 2019-2036.
- Johnston, C.A., T.N. Brown, T.P. Hollenhorst, **P.T. Wolter**, N.P. Danz, and G.J. Niemi. 2009. GIS in support of ecological indicator development. *Manual of Geographic Information Systems* (56):1095-1113.
- Wolter, P.T.**, P.A. Townsend, C.C. Kingdon, and B.R. Sturtevant. 2008. Remote sensing of the distribution and abundance of host species for spruce budworm in N. Minnesota and Ontario. *Remote Sensing of Environment*, 112(10), 3971-3982.
- Johnston, C.A., T. Watson, and **P.T. Wolter**. 2008. Sixty-three years of land alteration in Erie Township. *International Journal of Great Lakes Research*, 33 (3), 253–268.