

**NATURAL RESOURCE ECOLOGY & MANAGEMENT DEPARTMENT**  
**REFEREED JOURNAL PUBLICATIONS - 2013**

--Bold denotes NREM faculty member

--Asterisk denotes post-doc, graduate student or NREM support staff as senior author

**2013 (Total - 73)**

Adams H.D., M.J. Germino, D.D. Breshears, G.A. Barron-Gafford, M. Guardiola-Claramonte, **C.B. Zou**, and T.E. Huxman. 2013. Non-structural leaf carbohydrate dynamics of *Pinus edulis* during drought-induced tree mortality reveal role for carbon metabolism in mortality mechanism. *New Phytologist* 197: 1142-1151.

Albanese, G.\*, and **C.A. Davis**. 2013. Broad-scale relationships between shorebirds and landscapes in Southern Great Plains. *Auk* 130: 88-97.

**Allen, K.P., R.D. Elmore**, and C. Harper. 2013. The Wildlife Habitat Education Program: Moving from contest participation to implementation. *Journal of Extension* 51 (2): 2TOT9.

Allred, B.W., **S.D. Fuhlendorf**, T.J. Hovick, **R.D. Elmore, D.M. Engle**, and A. Joern. 2013. Conservation implications of native and introduced ungulates in a changing climate. *Global Change Biology* 19: 1875-1883.

Amini, M.H., R. Hashim, **S. Hiziroglu**, N. Syuhada, O. Sulaiman. 2013. Properties of particleboard made from rubberwood using modified starch as binder. *Composites Part-B Engineering* 50: 259-264.

Baskaran, M., R. Hashim, K. Sudah, O. Sulaiman, **S. Hiziroglu**, T. Arai, A. Kosugi. 2013. Influence of steam treatment on the properties of particleboard made from oil palm trunk with addition of polyhydroxyalkanoates. *Industrial Crops and Products* 51: 334-341.

Bakar, F.B., **S. Hiziroglu**, and P. Tahir. 2013. Properties of some thermally modified wood species. *Materials and Design* 43: 348-355.

Beas, B.J.\*, L.M. Smith, **K.R. Hickman**, T.G. LaGrange, and R. Stutheit. 2013. Seed bank responses to wetland restoration: do restored wetlands resemble reference wetland conditions following sediment removal? *Aquatic Botany* 108: 7-15.

Becerra, T.A., **D.M. Engle, R.D. Elmore**, and **S.M. Fuhlendorf**. 2013. Contrasting preference for grassland landscapes among population groups in the Central and Southern Great Plains. *Rangeland Ecology and Management* 66: 529-538.

- Bekhta, P., S. Korkut, and **S. Hiziroglu**. 2013. Effect of pretreatment of raw material on properties of particleboard panels made from wheat straw. *Bioresources* 8 (3): 4766-4774.
- Bodine, K.A., **D.E. Shoup**, J. Olive, Z.L. Ford, R. Krogman, and T.J. Stubbs. 2013. Catfish sampling techniques: where we are now and where we should go? *Fisheries* 38 (12): 529-546.
- Boon, J.G., R. Hashim, O. Sulaiman, **S. Hiziroglu**, T. Sugimoto, and M. Sato. 2013. Influence of processing parameters on some properties of oil palm trunk binderless particleboard. *European Journal of Wood Products* 71: 583-589.
- Breshears, D.D., H.D. Adams, D. Eamus, N.G. McDowell, D.J. Law, **R.E. Will**, A.P Williams and **C.B Zou**. 2013. The crucial amplifying role of increasing atmospheric moisture demand on tree mortality associated with regional die off. *Frontiers in Plant Science* 4: 266. doi: 10.3389/fpls.2013.00266
- Brewer, S.K.**, and T.B. Grabowski. 2013. Evaluating the reproductive success of Arkansas River shiner by assessing early life-history stage dispersal and survival at the landscape level. U.S. Department of the Interior, U.S. Fish and Wildlife Service, Cooperators Science Series, FWS/CSS-103, Washington D.C.
- Brewer, S.K.** 2013. Groundwater influences on the distribution and abundance of riverine smallmouth bass, *Micropterus dolomieu*, in pasture landscapes of the Midwestern United States. *River Research and Applications* 29: 269–278.
- Brewer, S.K.** 2013. Channel unit use by smallmouth bass: Do land-use constraints or quantity of habitat matter? *North American Journal of Fisheries Management* 33: 351–358.
- Bryars, C., C. Maier, D. Zhao, M. Kane, B. Borders, **R. Will**, and R. Teskey. 2013. Fixed physiological parameters in the 3-PG model produced accurate estimates of loblolly pine growth on sites in different geographic regions. *Forest Ecology and Management* 289: 501-514.
- Cooper, B., **R.D. Elmore**, and **F.S. Guthery**. 2013 Characteristics of Cassin's Sparrow Territories. *American Midland Naturalist* 171: 90-96.
- Crosby, A.D.\*, **R.D. Elmore**, and **D.M. Leslie, Jr.** 2013. Northern bobwhite response to habitat restoration in eastern Oklahoma. *Wildlife Society Bulletin* 37: 733–740.
- Crosby, A.D.\*, and **R.D. Elmore**. 2013. Effect of abundance and survey protocol on estimates of occupancy and detection probability for northern bobwhites. *Quail VII*: 127-133.
- Donmez-Cavdar, A., H. Yel, H. Kalaycioglu, **S. Hiziroglu**. 2013. Effect of waste melamine impregnated paper on properties of oriented strand board. *Materials and Design* 51: 751-755.
- Dvoretz, D.\*, J. Bidwell, **C. Davis**, and C. DuBois. 2013. Assessing natural and anthropogenic variability in wetland structure for two hydrogeomorphic riverine wetland subclasses. *Environmental Management* 52: 1009-1022.

Dyer, J.J.\*, **S.K. Brewer**, T.A. Worthington, and E.A. Bergey. 2013. The influence of coarse-scale environmental features on current and future model-predicted distributions of narrow-range endemic crayfish populations. *Freshwater Biology* 58: 1071–1088.

Fulbright, T.E., **K.R. Hickman**, and D.G. Hewitt. 2013. Exotic grass invasion and wildlife abundance and diversity, south-central United States. *Wildlife Society Bulletin* 37: 503-509.

Gatlin, M.R.\*, **Shoup, D.E.**, and Long J.M. 2013. Invasive zebra mussels (*Dreissena polymorpha*) and Asian clams (*Corbicula fluminea*) survive gut passage of migratory fish species: implications for dispersal. *Biological Invasions* 15: 1195-1200.

Ge, J., and **C.B. Zou**. 2013. Impacts of woody plant encroachment on regional climate in the Southern Great Plains of the USA. *Journal of Geophysical Research – Atmosphere* 118: 9093-9104. doi:10.1002/jgrd.50634, 2013.

George, A.D., T.J. O’Connell, **K.R. Hickman**, and **D.M. Leslie, Jr.** 2013. Use of seeded exotic grasslands by wintering birds in mixed-grass prairie. *The Prairie Naturalist* 45: 77–83.

George, A.D., T.J. O’Connell, **K. R. Hickman**, and **D.M. Leslie, Jr.** 2013. Food availability in exotic grasslands: A potential mechanism for depauperate breeding assemblages. *Wilson Journal of Ornithology* 125: 526–533.

Hartnett, D.C.\*, **G.W.T. Wilson**, J.P. Ott, and M. Setshogo. 2013. Variation in root system traits among African semi-arid savanna grasses: Implications for drought tolerance. *Austral Ecology* 38: 383-392.

**Hiziroglu, S.**, Z.W. Zhong, H.L. Tan. 2013. Measurement of bonding strength of pine, kapur and meranti wood species as function of their surface quality. *Measurement* 46 (9): 3189-3201.

Ji, B., C.A. Gehring, **G.W.T. Wilson**, R.M. Miller, L. Flores-Renteria, and N.C. Johnson. 2013. Patterns of diversity and adaptation in *Glomeromycota* from three prairie grasslands. *Molecular Ecology* 22: 2573-2587.

Kagima, B., and **W.S. Fairbanks**. 2013. Habitat selection and diet composition of reintroduced native ungulates in a fire-managed tallgrass prairie reconstruction. *Ecological Restoration* 31: 79-88.

Korkut-Sevim, D., **S. Hiziroglu**, and A. Aytin. 2013. Effect of heat treatment of surface characteristics of wild cherry wood. *Bioresources* 8 (2): 1582-1590.

Korkut, S.D., and **S. Hiziroglu**. 2013. Selected properties of heat treated Eastern Redcedar (*Juniperus virginiana* L.) wood. *Bioresources* 8 (3): 4756-4765.

Kurzawski, K.F., W.L. Fisher, D. Miller, and **J.M. Long**. 2013. The 2012 salary survey of public and private sector fisheries employers in the United States and Canada. *Fisheries* 138: 167-178.

Lee, D. N., R. W. Dolman, and **D. M. Leslie, Jr.** 2013. *Oryx callotis* (Artiodactyla: Bovidae). Mammalian Species 45(897): 1–11.

**Leslie, D. M., Jr.**, \*R. W. Dolman, and D. N. Lee. 2013. *Elaphodus cephalophus* (Artiodactyla: Bovidae). Mammalian Species 45 (904): 80–91.

**Long, J.M.** 2013. Book review: Conservation, ecology, and management of catfish: the second international symposium. Fisheries 38: 462.

**Long, J.M.** and J.J. Schaffler. 2013. Documenting utility of paddlefish otoliths for quantification of metals using inductively coupled plasma mass spectrometry. Rapid Communications in Mass Spectrometry 27: 2188-2194.

**Loss, S.R.**, T. Will, and P.P. Marra. 2013. Estimates of bird collision mortality at wind farms in the United States. Biological Conservation 168: 201-209.

**Lynch, T.B.** and J.H. Gove. 2013. An antithetic variate to facilitate upper-stem height measurements for critical height sampling with importance sampling. Canadian Journal of Forestry Research 43: 1151-1161.

McGranahan, D.A.\* , **D.M. Engle**, J.R. Miller, and D.M. Debinski. 2013. An invasive grass increases live fuel proportion and reduces fire spread in a simulated grassland. Ecosystems 16: 158–169.

McGranahan, D.A.\* , **D.M. Engle**, **S.D. Fuhlendorf**, S.L. Winter, J.R. Miller and D.M. Debinski. 2013. Inconsistent outcomes of heterogeneity-based management underscore importance of matching evaluation to conservation objectives. Environmental Science and Policy 31: 53–60.

McGranahan, D.A.\* , **D.M. Engle**, **S.D. Fuhlendorf**, J.R. Miller, and D.M. Debinski. 2013. Multivariate analysis of rangeland vegetation and soil organic carbon describes degradation, informs restoration and conservation. Land 2: 328-350.

Meyer, M.D.\* , **C.A. Davis**, J.R. Bidwell. 2013. Assessment of two methods for sampling invertebrates in shallow vegetated wetlands. Wetlands 33: 1063–1073.

Middleton, A.D., T.A. Morrison, J.K. Fortin, M.J. Kauffman, C.T. Robbins, K.M. Proffitt, P.J. White, D.E. McWhirter, T.M. Koel, D. Brimeyer, and **W.S. Fairbanks**. 2013. Grizzly bear predation links the loss of native trout to the demography of migratory elk in Yellowstone. Proceedings of the Royal Society B 280:20130870. DOI: 10.1098/rspb.2013.0870

Nordin, A, O. Sulaiman, R. Hashim, N. Salim, S. Masatoshi, **S. Hiziroglu**. 2013. Properties of laminated panels made from compressed oil palm trunk. Composites Part B: Engineering 52: 100-105.

Penn, C., **Will, R.**, Fultz, L., and Hamilton, D. 2013. Forage and tree growth in a soil with an encased swine sludge layer. *Journal of Environmental Management* 128: 586-593.

Polito, V.J., K.A. Baum, M.E. Payton, S.E. Little, **S.D. Fuhlendorf**, and M.V. Reichard. 2013. Tick abundance and levels of infestation on cattle in response to patch burning. *Rangeland Ecology and Management* 66: 545-552.

Polo, J.A., **S.W. Hallgren**, and D.M. Leslie, Jr. 2013. Effect of long-term understory prescribed burning on standing and down dead woody material in dry upland oak forests. *Forest Ecology and Management* 291: 128–135.

Priadi, T., **S. Hiziroglu**. 2013. Characterization of heat treated wood species. *Materials and Design* 49: 575-582.

Ramachandriya, K.D., M.R. Wilkins, **S. Hiziroglu**, N.T. Dunford, and H.K. Atiyeh. 2013. Development of an efficient pretreatment process for enzymatic saccharification of eastern redcedar. *Bioresource Technology* 136:131-139.

Ramachandriya, K.D., M.R. Wilkins, H.K. Atiyeh, N.T. Dunford, and **S. Hiziroglu**. 2013. Effect of high dry solid loading on enzymatic hydrolysis of acid bisulfite pretreated Eastern Redcedar. *Bioresource Technology* 147: 168-176.

Robertson, S.\*, **K.R. Hickman**, K.R. Harmony, and **D.M. Leslie, Jr.** 2013. Combining glyphosate with burning or mowing improves control of yellow bluestem (*Bothriochloa iscahemum*). *Rangeland Ecology and Management* 66:376-381.

Salim, N., R. Hashim, O. Sulaiman, N.A. Nordin, M. Ibrahim, H.M.D. Akil, M. Sato, T. Sugimoto, **S. Hiziroglu**. 2013. Effect of steaming on some properties of compressed oil palm trunk lumber. *Bioresources* 8 (2): 2310-2324.

Schmitt, J.D.\*, and **Shoup, D.E.** 2013. Delayed hooking mortality of blue catfish caught on juglines. *North American Journal of Fisheries Management* 33: 245-252.

Sulaiman, N.S., R. Hashim, M.H.M. Amini, O. Sulaiman, and **S. Hiziroglu**. 2013. Evaluation of properties of particleboard made using oil palm starch modified with epichlorohydrin. *Bioresources* 8 (1): 283-301.

**Talent, L.G.**, and S.G. Talent. 2013. Effects of crowding on reproductive traits of western fence lizards, *Sceloporus occidentalis*. *Herpetological Conservation and Biology* 8 (1): 251–257.

Twidwell, D.\*, W.E. Rogers, **S.D. Fuhlendorf**, C.L. Wonkka, **D.M. Engle, J.R. Weir**, U.P. Kreuter and C.A. Taylor. 2013. The rising Great Plains fire campaign: citizens' response to woody plant encroachment. *Frontiers in Ecology and Environment* 11: 64-71.

Twidwell, D.\*, **S.D. Fuhlendorf**, C.A. Taylor and W.E. Rodgers. 2013. Refining thresholds in coupled fire-vegetation models to improve management of encroaching woody plants in grasslands. *Journal of Applied Ecology* 50: 603-613.

Twidwell, D.\*, B.W. Allred, and **S.D. Fuhlendorf**. 2013. National-scale assessment of ecological content in the world's largest land management framework. *Ecosphere* 4 (8), art94.

Twidwell D.\*, C.L. Wonkka, C.A. Taylor, **C.B. Zou**, J.J. Twidwell, and W.E. Rodgers. 2013. Drought-induced woody plant mortality in an encroached semiarid savanna depends on topographic factors and land management. *Applied Vegetation Science*. doi: 10.1111/avsc.12044.

**Weir, J.R.**, and R.F. Limb. 2013. Seasonal variation in flammability of *Quercus marilandica* and *Quercus stellata* leaf litter burned in the laboratory. *Fire Ecology* 3: 80-88.

**Will, R.E.**, S.M. Wilson, **C.B. Zou** and T.C. Hennessey. 2013. Increased VPD due to higher temperature leads to greater transpiration and faster mortality during drought for tree seedlings common to the forest-grassland ecotone. *New Phytologist* 200: 366-374.

**Will, R.E.**, C.J. Lilly, J. Stewart, S. Huff and C.G. Tauer. 2013. Recovery from topkill of shortleaf pine X loblolly pine hybrids compared to their parent populations. *Trees: Structure and Function* 27: 1167–1174.

Williams, R., **T. Kuzmic** and B. Orr. 2013. The student-citizen and study abroad. *Journal of Forestry* 111 (4): 300-302.

Williams, R.J.\*, **S.W. Hallgren**, **G.W.T. Wilson** and M.W. Palmer. 2013. *Juniperus virginiana* encroachment into upland oak forests alters arbuscular mycorrhizal abundance and litter chemistry. *Applied Soil Ecology*. 65: 23-30.

Winter, S.L.\*, **S.D. Fuhlendorf**, and B.L. Smith. 2013. Breeding bird communities associated with tallgrass prairies in southeast Nebraska. *Transactions of the Nebraska Academy of Sciences* 33: 39-45.

Winter, S.L.\*, **K.R. Hickman**, C.L. Goad, **S.D. Fuhlendorf**, and **M.S. Gregory**. 2013. Seasonal Fires, Bison Grazing and the Tallgrass Prairie Forb *Arnoglossum plantagineum* Raf. *Natural Areas Journal* 33:327-338.

Worthington, T.A., **S.K. Brewer**, T.B. Grabowski, and J. Mueller. 2013. Evaluating the sampling efficiency of the Moore egg collector. *North American Journal of Fisheries Management* 33: 79–88.

Worthington, T.A., **S.K. Brewer** and N. Farless. 2013. Spatial and temporal variation in efficiency of the moore egg collector. *North American Journal of Fisheries Management* 33: 1113-1118.

Zhong, Z.W., **S. Hizioglu**, and C.T.M Chan. 2013. Measurement of the surface roughness of wood based materials used in furniture manufacture. *Measurement* 46(6): 1482-1487.

**Zou, C.B.**, D.J. Turton, **R.E. Will**, **D.M. Engle**, and **S.D. Fuhlendorf**. 2013. Alteration of hydrological processes and streamflow with juniper (*Juniperus virginiana*) encroachment in a mesic grassland catchment. *Hydrological Processes* DOI:10.1002/hyp.10102.