

**NATURAL RESOURCE ECOLOGY & MANAGEMENT DEPARTMENT**  
**REFEREED JOURNAL PUBLICATIONS - 2015**

--Bold denotes NREM faculty member

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

**2015 (Total - 76)**

Albanese, G.\*, and **C.A. Davis**. 2015. Characteristics within and around stopover wetlands used by migratory shorebirds: Is the neighborhood important? *Condor* 117: 328-340.

Allred, B.W., W.K. Smith, D. Twidwell, J.H. Haggerty, S.W. Running, D.E. Naugle, and **S.D. Fuhlendorf**. 2015. Ecosystem services lost to oil and gas in North America. *Science* 348 (6233), 401-402.

Andersson, K., **C.A. Davis**, G. Harris, and D.A. Haukos. 2015. An assessment of nonbreeding waterfowl surveys on National Wildlife Refuges in the Central Flyway. *Wildlife Society Bulletin* 39: 79-86.

Atuo, F., **T. J. O'Connell**, and P.U. Abanyan. 2015. An assessment of socioeconomic drivers of avian body parts trade in West African rainforests. *Biological Conservation* 191: 614-622.

Baskaran, M., R. Hashim, O. Sulaiman, **S. Hiziroglu**, M. Sato, and T. Sugimoto. 2015. Optimization of press temperature and time for binderless particleboard manufactured from oil palm trunk biomass at different thickness levels. *Material Today Communications* 3: 87-95.

Bendixsen, D.P.\*, **Hallgren, S.W.**, and Frazier, A.E. 2015. Stress factors associated with forest decline in xeric oak forests of south-central United States. *Forest Ecology and Management* 347: 40-48.

Beston, J.A., Diffendorfer, J.E. and **Loss, S.R.** 2015. Insufficient sampling to identify species affected e collisions. *Journal of Wildlife Management* 79: 513-517.

Bried, J.T.\*, N.E. McIntyre, A.R. Dzialowski, and **C.A. Davis**. 2015. Resident-immigrant dichotomy matters for classifying wetland site groups and metacommunities. *Freshwater Biology* 60: 2248-2260.

Carroll, J.M.\*, **C.A. Davis**, **R.D. Elmore**, **S.D. Fuhlendorf**, and E.T. Thacker. 2015. Thermal patterns constrain diurnal behavior of a ground-dwelling bird. *Ecosphere* 6 (11): 222. <http://dx.doi.org/10.1890/ES15-00163.1>.

Carroll, J.M.\*, **C.A. Davis**, **R.D. Elmore**, and **S.D. Fuhlendorf**. 2015. A ground-nesting galliform's response to thermal heterogeneity: Implications for ground-dwelling birds. *PloS One* 10 (11). DOI:10.1371/journal.pone.0143676 November 30, 2015

Cartabiano, E.C., D.R. Stewart, and **J.M. Long**. 2015. Effect of bait and gear type on turtle bycatch and Channel Catfish population estimates in a reservoir. *Journal of Freshwater Ecology* 30: 407-415.

Chen S.J., **C.B. Zou**, T. Cao, J. Huang, S. Wu, S.X. Zhang, and C.G. Chen. 2015. Temporal dynamics and vertical attenuation of photosynthetically active radiation (PAR) in secondary *Pinus Tabulaeformis* stands in the Qinling Mountains. *Journal of Basic Science and Engineering* 23: 1069-1079.

Choowang, R., and **S. Hiziroglu**. 2015. Properties of thermally compressed oil palm wood (*Elaeis guineensis* Jacq.) using hot press process. *Journal of Tropical Forest Science* 27 (1): 39-36.

Claytor, M., and **K.R. Hickman**. 2015. Kudzu, *Pueraria montana* (Lour.) Merr. Abundance and distribution in Oklahoma. *Oklahoma Native Plant Record* 15: 96-102.

Cole, E.K., A.M. Foley, J.M. Warren, B.L. Smith, S.R. Dewey, D.G. Brimeyer, **W.S. Fairbanks**, H. Sawyer, and P.C. Cross. 2015. Changing migratory patterns in the Jackson elk herd. *Journal of Wildlife Management* 79: 877-886.

Crosby, A., **R.D. Elmore**, **D.M. Leslie Jr.**, and **R.E. Will**. 2015. Looking beyond rare species as umbrella species: northern bobwhites (*Colinus virginianus*) and conservation of grassland and shrubland birds. *Biological Conservation* 186: 233-240

Dale J.\*, **C.B. Zou**, W.J. Andrews, **J.M. Long**, Y. Liang, and L. Qiao. 2015. Climate, water use, and land surface transformation in an irrigation intensive watershed—Streamflow responses from 1950 through 2010. *Agricultural Water Management* 160: 144-152

Danish, M., T., Ahmad., R. Hashim, M.R. Hafiz, A. Ghazali, O. Sulaiman, and **S. Hiziroglu**. 2015. Characterization and adsorption kinetic study of surfactants treated oil palm empty fruit bunches. *Desalination and Water Treatment*. Taylor and Francis. doi:10.1080/19443994.2015.1028456.

Diffendorfer, J.E., R. Erickson, K. Heist, D.H. Johnson, **S.R. Loss**, W. Thogmartin, M. Merrill, and M. Corum. 2015. Draft methodology to assess the impact of wind energy development on birds and bats. U.S. Geological Survey, Scientific Investigations Report 2015-5066, 40 p. <http://dx.doi.org/10.3133/sir20155066>. (peer-reviewed report).

Dilik, T., S. Erdinler, E. Hazir, H. Koc, and **S. Hiziroglu**. 2015. Adhesion strength of wood-based composites coated with cellulosic and polyurethane paints. *Advances in Materials Science and Engineering*. Article ID 745675 <http://dx.doi.org/10.1155/2015/745675>.

- Dilik, T., and **S. Hiziroglu**. 2015. Some properties of linoleum and wood laminated flooring panels with magnesium substrate. *Bioresources* 10 (1): 1667-1674.
- Dipesh, K.C.\*, **R.E. Will, T.B. Lynch**, R. Heinemann, and R. Holeman. 2015. Comparison of loblolly, shortleaf, and pitch X loblolly pine plantations growing in Oklahoma. *Forest Science* 61: 540-547.
- Dipesh, K.C.\*, **R.E. Will, T.B. Lynch**, T. Hennessey, R. Holeman, R. Heinemann, and D. Wilson. 2015. Effects of simulated ice storm damage on mid-rotation loblolly pine stands. *Forest Science* 61: 744-749.
- Dipesh, K.C.\*, **R.E. Will**, T.C. Hennessey, and C.J. Penn. 2015. Evaluating performance of short-rotation woody crops in a decommissioned swine lagoon. *New Forests* 46: 267-281.
- Dyer, J.J., T.A. Worthington, and **S.K. Brewer**. 2015. Response of narrow-range crayfish to hyporheic water availability and excess sedimentation. *Hydrobiologia* 747: 147-157.
- Foster, A.J., K. Dhakal, V.G. Kakani, **M. Gregory** and J. Mosali. 2015. Fine and Coarse Scale Sampling of Spatial Variability within a Switchgrass Field in Oklahoma. *International Journal of Plant and Soil Science* 6 (5): 254-265.
- Goodman, L.E.**, A.F. Cibils, R.L. Steiner, J. D. Graham, and K.C. McDaniel. 2015. Control of silky crazyweed (*Oxytropis sericea*) with aminopyralid + 2,4-D and picloram + 2,4-D on native rangeland. *Invasive Plant Science and Management* 8: 401-408.
- Guldin, J.M., **S.W. Hallgren**, and J.S. Crooks. 2015. Outlook for Mid-South forests: a subregional report from the Southern Forest Futures Project. USDA Forest Service, Southern Research Station Gen. Tech. Rep. SRS-206. Asheville, NC. 70 pages (peer-reviewed report). Available at: <http://www.srs.fs.usda.gov/pubs/47958#sthash.G6K9Omfy.dpufv>.
- Hegazy, S., K. Ahmed, and **S. Hiziroglu**. 2015. Oriented strandboard production from water treated date palm fronds. *Bioresources* 10 (1): 448-456.
- Hovick, T.J.\*, **R.D. Elmore, S.D. Fuhlendorf, D.M. Engle**, and R.G. Hamilton. 2015. Spatial heterogeneity increases diversity and stability in grassland bird communities. *Ecological Applications* 25: 662-672.
- Hovick, T.J.\*, D.K. Dahlgren, M. Papes, **R.D. Elmore**, and J.C. Pitman. 2015. Predicting greater prairie-chicken lek site suitability to inform conservation actions. *PLoS One* 10(8): e0137021.doi:10.1371/journal.pone.0137021.
- Hovick T.J.\*, B.W. Allred, **R.D. Elmore, S.D. Fuhlendorf**, R.G. Hamilton, and A. Breland. 2015. Dynamic disturbance processes create dynamic lek site selection in a prairie grouse. *PloS One* 10(9): e0137882.

Hovick, T.J.\*, **R.D. Elmore**, **S.D. Fuhlendorf**, and D.K. Dahlgren. 2015. Weather Constrains the Influence of Fire and Grazing on Nesting Greater Prairie-Chickens. *Rangeland Ecology and Management* 68 (2): 186-193

Johnson, N.C., **G.W.T. Wilson**, J.A. Wilson, R.M. Miller, and M. Bowker. 2015. Mycorrhizal phenotypes and the law of the minimum. *New Phytologist* 205: 1473-1484.

Karamuri, S., **S. Hiziroglu**, and K. Kalkan. 2015. Thermoset-crosslinked lignocellulose: a moldable plant biomass. American Chemical Society (ACS). *Applied Materials and Interfaces* 7 (12): 6596-6604.

Karki, L., and **Hallgren, S.W.** 2015. Tree-fall gaps and regeneration in old-growth Cross Timbers forests. *Natural Areas Journal* 35: 533-541.

Krueger, E.S., T.E. Ochsner, **D.M. Engle**, J.D. Carlson, D. Twidwell, and **S.D. Fuhlendorf**. 2015. Soil moisture affects growing-season wildfire size in the Southern Great Plains. *Soil Science Society of America Journal* 79 (6): 1567-1576

Lee, D.N., R.C. Stark, W.L. Puckette, M.J. Hamilton, **D.M. Leslie, Jr.**, and R.A. Van Den Bussche. 2015. Population connectivity of endangered Ozark big-eared bats (*Corynorhinus townsendii ingens*). *Journal of Mammalogy* 96: 522–530.

**Leslie, D.M., Jr.**, and B.A. Huffman. 2015. *Potamochoerus porcus* (Artiodactyla: Suidae). *Mammalian Species* 47 (919): 15–31.

**Loss, S.R.**, S.S. Loss, T. Will, and P.P. Marra. 2015. Linking place-based citizen science with large-scale conservation research: A case study of bird-building collisions and the role of professional scientists. *Biological Conservation* 184: 439-445.

**Loss, S.R.**, T. Will, and P.P. Marra. 2015. Direct mortality of birds from anthropogenic causes. *Annual Review of Ecology, Evolution, and Systematics* 46: 99-120.

**Lynch, T.B.** 2015. Effects of measurement error on Monte Carlo integration estimators of tree volume: critical height sampling and vertical Monte Carlo methods. *Canadian Journal of Forestry Research* 45: 463-470.

**Lynch, T.B.** 2015. Effects of measurement error on Monte Carlo integration estimators of tree volume: sample diameters measured at random upper-stem heights. *Canadian Journal of Forestry Research* 45: 471-479.

**Lynch, T.B.** 2015. Voronoi polygons quantify bias when sampling the nearest plant. *Canadian Journal of Forestry Research* 45: 1853-1859.

Lyons, T.P., J.R. Miller, D.M. Debinski, and **D.M. Engle**. 2015. Predator identity influences the effect of habitat management on nest predation. *Ecological Applications* 25: 1596-1605.

Marra, P.P., Cohen, E.B., **Loss, S.R.**, Rutter, J.E., and Tonra, C.M. 2015. A call for full annual cycle research in animal ecology. *Biology Letters* 11(8).

Meyer, M.D.\*, **C.A. Davis**, and D. Dvoretz. 2015. Response of wetland invertebrate communities to local and landscape factors in north central Oklahoma. *Wetlands* 35: 533-546.

Nasser, R., **S. Hiziroglu**, M. Abdel, H. Al-Mefarrej, N. Shetta, and I. Afef. 2015. Measurement of some properties of pulp and paper made from date palm midribs and wheat straw by soda-aq pulping process. *Measurement* 62: 179-186.

Ozdemir, T., **S. Hiziroglu**, and M. Kocapinar. 2015. Effect of heartwood and sapwood ratio on adhesion strength of finished wood species. *Advances in Material Science and Engineering*. Article ID 418618. <http://dx.doi.org/10.1155/2015/418618>.

Ozdemir, T., **S. Hiziroglu**, and M. Kocapinar. 2015. Adhesion strength of cellulose varnish coated wood species as function of their surface roughness. *Advances in Materials Science and Engineering*. Article ID 525496, 5 pages. <http://dx.doi.org/10.1155/2015/525496>.

Qiao, L.\*, **C.B. Zou, R.E. Will**, and E. Stebler. 2015. Calibration of SWAT model using experimental watershed data for application in woody plant encroachment. *Journal of Hydrology* 523: 231-239.

Powers, J, **S.K. Brewer, J.M. Long**, and T. Campbell. 2015. Evaluating the use of side-scan sonar for detecting freshwater mussel beds in turbid river environments. *Hydrobiologia* 743: 127-137.

Salim, N., R. Hashim, O. Sulaiman, M. Ibrahim, M. Nasir, M. Sato, T. Sugimoto, and **S. Hiziroglu**. 2015 Improved performance of compressed oil palm trunk prepared from modified pre-steaming technique. *Journal of the Indian Academy of Wood Science*. doi:10.1007/S13196-015-0155-1.

Salleh, M.K., R. Hashim, O. Sulaiman, **S. Hiziroglu**, W.N.A. Wan Nadhari, N.A. Karim, N. Jumhuri, and L.Z. Ping Ang. 2015. Evaluation of properties of starch based adhesives and particleboard manufactured from them. *Journal of Adhesion Science and Technology* 29 (4): 319-336.

Scasta, J.D.\*, **D.M. Engle, S.D. Fuhlendorf**, D.D. Redfearn, and **T.G. Bidwell**. 2015. Meta-analysis of exotic forages as invasive plants in complex multi-functioning landscapes. *Invasive Plant Science and Management* 8: 292-306.

Scasta, J.D.\*, **J.R. Weir**, and **D.M. Engle**. 2015. Assessment of experiential education in prescribed burning for natural resource managers. *Fire Ecology* 11: 88-105.

Scasta, J.D.\*, **D.M. Engle**, J.L. Talley, **J.R. Weir, S.D. Fuhlendorf**, and D. Debinski. 2015. Drought inhibits patch-burn grazing efficacy on parasitic flies of cattle. *Rangeland Ecology and Management* 68: 290-297.

Scasta, J.D.\*, E.T. Thacker, T.J. Hovick, **D.M. Engle**, B.W. Allred, **S.D. Fuhlendorf**, and **J.R. Weir**. 2015. Patch-burn grazing (PBG) as a livestock management alternative for fire-prone ecosystems of North America. *Renewable Agriculture and Food Systems*. doi:10.1017/S1742170515000411 (18 pages).

**Shoup, D.E.** and D.W. Lane. 2015. Effects of turbidity on prey selection and foraging return of adult largemouth bass in reservoirs. *North American Journal of Fisheries Management* 35: 913-924.

Smith, J.A., T.W. Matthews, E.D. Holcomb, L.P. Negus, **C.A. Davis**, M.B. Brown, L.A. Powell, and J.S. Taylor. 2015. Invertebrate prey selection by ring-necked pheasant (*Phasianus colchicus*) broods in Nebraska. *American Midland Naturalist* 173: 318-325.

Stahr, K.J.\*, and **D.E. Shoup**. 2015. American water willow mediates survival and anti-predator behavior of juvenile largemouth bass. *Transactions of the American Fisheries Society* 144: 903-910.

Stewart D.R., **J.M. Long**, and **D.E. Shoup**. 2015. Spatial structuring within a reservoir fish population: implications for management. *Marine and Freshwater Research* 66: 202-212.

Stewart, D.R. and **J.M. Long**. 2015. Growth and contribution of stocked channel catfish, *Ictalurus punctatus* (Rafinesque 1818); the importance of measuring post-stocking performance. *Journal of Applied Ichthyology* 31: 695-703.

Stewart, D.R. and **J.M. Long**. 2015. Using an experimental manipulation to determine the effectiveness of a stock enhancement program. *Journal of Freshwater Ecology* <http://dx.doi.org/10.1080/02705060.2015.1021715>.

Stewart J.F., **R.E. Will**, K.M. Robertson, and C.D. Nelson. 2015. Frequent fire protects shortleaf pine from introgression by loblolly pine. *Conservation Genetics* 16: 491-495.

Tanner, E.P.\*, **R.D. Elmore**, **S.D. Fuhlendorf**, **C.A. Davis**, E.T. Thacker, and D.K. Dahlgren. 2015. Behavioral responses at distribution extremes: How artificial surface water can affect quail movement patterns. *Rangeland Ecology and Management* 68: 476-484.

Twidwell, D., A.S. West, W.B. Hiatt, A.L. Ramirez, J.T. Winter, **D.M. Engle**, **S.D. Fuhlendorf**, and J.D. Carlson, J.D. 2015. Plant invasions or fire policy: which has altered fire behavior more in tallgrass prairie? *Ecosystems* 2015: 1-13.

Twidwell, D., C.L. Wonkka, M.T. Sindelar, and **J.R. Weir**. 2015. First approximations of prescribed fire risks to other management techniques used on private lands. *PLoS One* 10(10): e0140410.

Villegas J.C., F. Dominguez, G.A. Barron-Gafford, H.D. Adams, M. Guardiola-Claramonte, E.D. Sommer, A.W. Selvey, J.F. Espeleta, **C.B. Zou**, D.D. Breshears, and T.E. Huxman. 2015.

Sensitivity of regional evapotranspiration partitioning to variation in woody plant cover: insights from experimental dryland tree mosaics. *Global Ecology and Biogeography* 24: 104-1048

Weber, M.J., M.L. Brown, D.H. Wahl, and **D.E. Shoup**. 2015. Metabolic theory explains latitudinal variation in common carp *Cyprinus carpio* populations and predicts responses to climate change. *Ecosphere* 6: art54.

**Will, R.E.**, T.R. Fox, M. Akers, J-C Domec, E. Jokela, M. Kane, M.A. Laviner, G. Lokuta, D. Markewitz, M.A. McGuire, C. Meek, A. Noormets, L. Samuelson, J. Seiler, B. Strahm, R. Teskey, J. Vogel, E. Ward, J. West, D. Wilson, and T. Martin. 2015. A Range-wide experiment to investigate nutrient and soil moisture interactions in loblolly pine plantations. *Forests* 6: 2014-2028; doi:10.3390/f6062014

**Wilson, G.W.T.** 2015. *Bothriochloa ischaemum* (yellow bluestem). 2015. The Invasive Species Compendium: CAB International (peer-reviewed data sheet / open-access). [WWW.cabi.org http://www.cabi.org/isc/datasheet/112759](http://www.cabi.org/isc/datasheet/112759)

Wine M.L.\*, J.M.H. Hendrickx, D. Cadol, **C.B. Zou**, and T.E. Ochsner. 2015. Deep drainage sensitivity to climate, edaphic factors, and woody encroachment, Oklahoma, USA. *Hydrological Process*. doi:10.1002/hyp.10470

Winter S.L., B.W. Allred, **K.R. Hickman**, and **S.D. Fuhlendorf**. 2015. Tallgrass prairie vegetation response to spring fires and bison grazing. *The Southwestern Naturalist* 60: 30-35.

**Zou, C.B.**, G. Caterina, **R.E. Will**, E. Stebler and D. Turton. 2015. Dynamic and scaling of canopy rainfall interception for a tallgrass prairie under juniper encroachment. *PLoS One*. DOI: 10.1371/journal.pone.0141422.45.

**Zou C.B.**, L. Qiao, and B.P. Wilcox. 2015. Woodland expansion in central Oklahoma will significantly reduce streamflows—A modeling analysis. *Ecohydrology*. doi: 10.1002/eco.1684