

J. Kevin Hiers Publications (last 5 years)

Wiesner, S., C. L. Staudhammer, C. Javaheri, J. K. Hiers, L. Boring, R.J. Mitchell, and G. Starr. The role of understory phenology and productivity in the carbon dynamics of Longleaf Pine Savannas. *Ecosphere* (In Review)

Smith, K., L. Castle, S. Sherwood, S. Pokswinski, and J. Kevin Hiers. Legacies of past land use on the Southern Cumberland Plateau. *Natural Areas Journal* (In Press).

Hiers, J.K., C. L. Staudhammer, J. J. O'Brien, H. L. Gholz, T. A. Martin, J. Hom, and G. Starr. 2019. Fine dead fuel moisture shows complex lagged responses to environmental conditions in a palmetto (*Serenoa repens*) dominated understory. *Agricultural and Forest Meteorology* 266:20-28

Dell, J., J. J. O'Brien, E. L. Loudermilk, L. Dyer, L. Richards, Brett Williams, J. K. Hiers. 2019. Maximizing diversity for management activities: Additive partitioning of plant species diversity across a frequently burned ecosystem. *Forest Ecology and Management* 432:409-414.

Currie, M., B. Quaipe, K. Speer, J.K. Hiers, S. Goodrick, J.J. Obrien. 2018. Pixel-level statistical analyses of prescribed fire spread. *Canadian Journal of Forest Research* 49:18-26.

Shearman, T., J. M. Varner, J. K. Hiers, and K. Robertson. 2018. Allometry of *Aristida beyrichiana* and *A. stricta* in fire-maintained longleaf pine - wiregrass ecosystems. *American Journal of Botany* (In Press).

Loudermilk, E.L., J.K. Hiers, J.J. O'Brien. 2018. The role of fuels for understanding fire behavior and fire effects. In: L. Katherine Kirkman and Steven B. Jack, Ecological restoration and management of longleaf pine forests. CRC Press, Taylor & Francis Group. Pp. 107-122

O'Brien, J.J., J.K. Hiers, J.M. Varner, C.M. Hoffman, M. B. Dickinson, S.T. Michaletz, and B. W. Butler. 2018 Advances in Mechanistic Approaches to Quantifying Biophysical Fire Effects. *Current Forestry Reports* 4 (4):161-177.

Nowell, H.K., C. D. Holmes, K. Robertson, C. Teske, and J.K. Hiers. 2018. A new picture of open fire extent, variability, and drought interaction from Florida government records. *Geophysical Research Letters* 45(15): 7874-7884.

Kreye, J.K., J. K. Hiers, J. M. Varner, B. Hornsby, S. Drukker, J. J. O'Brien. 2018. Effects of solar heating on the moisture dynamics of forest floor litter in humid environments: composition, structure, and position matter. *Canadian Journal of Forest Research* 48:1-12.

Mell, W., A. Simeoni, D. Morvan, J. K. Hiers, N. Skowronski, R. Hadden. 2018. Clarifying the meaning of mantras in wildland fire behaviour modelling: reply to Cruz et al. *International Journal of Wildland Fire* 27. Doi:10.1071/WF18106

Hoffman, C.M., Carolyn H. Sieg, Rodman R. Linn, William Mell, Russell A. Parsons, Justin P. Ziegler, J. Kevin Hiers. 2018. Advancing the science of wildland fire dynamics using process-based models. *Fire*, 1(2), 32; <https://doi.org/10.3390/fire1020032>.

Ulyshen, M.D., S. Horn, S. Pokswinski, J. V. McHugh and J. Kevin Hiers. 2018. Characterization of coarse woody debris in old-growth longleaf pine forests and neighboring secondary forests in two regions on the southeastern U.S. coastal plain. *Forest Ecology and Management* 429:124-132.

Yedinak, K.M., E.K. Strand, J. Kevin Hiers, and J. M. Varner. 2018. Embracing Complexity to Advance the Science of Wildland Fire Behavior. *Fire* 1(2), 20; <https://doi.org/10.3390/fire1020020>.

Johnson, E.D., T. Spector, J. K. Hiers, D. Pearson, J. M. Varner, J. Bente. 2018. Defining old-growth stand characteristics in fragmented natural landscapes: a case study of old-growth pine in Florida (USA) State Parks, *Natural Areas Journal* 38(1): 88-98.

Dell, J.E., L.A. Richards, J. J. O'Brien, E. L. Loudermilk, A. T. Hudak, S. M. Pokswinski, B. C. Bright, J. K. Hiers, B. W. Williams, and L. A. Dyer. 2017. Fire, Fuels, and Diversity: Overstory-Derived Surface Fuels Mediate Plant Species Diversity in Frequently Burned Longleaf Pine Forests. *Ecosphere* 10 (8) DOI: 10.1002/ecs2.1964.

Schwartz, M, J.K. Hiers, F. Davis, G. Garfin, S. T. Jackson, A. Terando, C. Woodhouse, T. L. Morelli, M. Williamson, M. Brunson. 2017. Developing a translational ecology workforce. *Frontiers in Ecology and the Environment* 25(20): 587-596.

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Enquist, C. S. T. Jackson, G. Garfin, F. Davis, L. Gerber, J. Littell, J. Tank, A. Terando, T. Wall, B. Halpern, J. K. Hiers, T. L. Morelli, E. McNie, N. L. Stephenson, M. A. Williamson, C. A. Woodhouse, L. Yung, M. Brunson, K. Hall, L. M. Hallett, D. M. Lawson, M. Moritz, K. Nydick, Amber Pairis, A.J. Ray, C. Regan, H. D. Safford, M. W. Schwartz, M. R. Shaw. 2017. Foundations of Translational Ecology. *Frontiers in Ecology and the Environment* 15(10): 541-550.

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Loudermilk, E. L., J. K. Hiers, S. Pokswinski, J. J. O'Brien, A. Barnett, R. J. Mitchell. Oaks (*Quercus* spp.) facilitate longleaf pine (*Pinus palustris*) seedling establishment in xeric. *Ecosphere* 7 (6): e01361. [10.1002/ecs2.1361](https://doi.org/10.1002/ecs2.1361)

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Clements, C. B., N. P. Lareau, D. Seto, J. Contezac, B. Davis, C. Teske, T. J. Zajkowski, A. T. Hudak, B. C. Bright, M. B. Dickinson, B. W. Butler, D. J., J. K. Hiers. 2016. [Fire weather conditions and fire-atmosphere interactions observed during low-intensity prescribed fires—RxCADRE 2012](#). *International Journal of Wildland Fire* 25 (1): 90-101.

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