

SUMMARY CURRICULUM VITAE

[Robert J. Mitchell, Ph.D.](#)

Scientist



Dr. Mitchell's interests include the ecophysiological limits to productivity, particularly below ground, and how natural disturbance processes can be incorporated into silviculture to conserve southern pine grasslands. We have pioneered the incorporation of root order and mycorrhizae into a better understanding of how below ground processes regulate carbon and nutrient cycling. With Dr. Jerry Franklin of the University of Washington and Brian Palik of the USFS, he has developed a network of training workshops throughout the country for professional land

managers on ecological forestry. Dr. Mitchell has assisted in advisory groups for conservation management and has participated in regional, national and international forums on how forests can be managed in ways that produce timber wildlife but conserve native diversity.

Education:

Ph.D. in Forest, University of Missouri, 1984

M.S. in Forest, Southern Illinois University, 1980

B.S. in Forest, Southern Illinois University, 1979

Professional Experience:

Scientist, J. W. Jones Ecological Research Center, August 1, 1999-present

Adjunct Faculty Appointments:

Auburn University; University of Georgia; University of Florida; Virginia Polytechnic Institute and State University; and Florida State University.

Associate Scientist, J. W. Jones Ecological Research Center, 1992-1999

Associate Professor (tenured), Auburn University, and School of Forest, 1990-1992

Assistant Professor, Auburn University, School of Forest, 1986-1990

Refereed Research Journal Publications: (2001-2012)

Loudermilk, E. L., J. J. O'Brien, R. J. Mitchell, W. P. Cropper, J. K. Hiers, S. Grunwald, J. Grego, and J. Fernandez. (In Press). Linking complex forest fuel structure and fire behavior at fine scales. *International Journal of Wildland Fire*.

- Ford, C. R., J. McGee, F. Scandellari, E. A. Hobbie, and R. J. Mitchell. 2012. Long- and short-term precipitation effects on soil CO₂ efflux and total belowground carbon allocation. *Agricultural and Forest Meteorology* 156:54-64.
- Hiers, J. K., and R. J. Mitchell, A. Barnett, J. W. Walters, M. Mack, B. Williams, and R. Sutter. 2012. The Dynamic Reference Concept: measuring restoration success in a rapidly changing no-analogue future. *Ecological Restoration* 30:27-36.
- Runion, G. B., J. R. Butnor, S. A. Prior, R. J. Mitchell, and H. H. Rogers. 2012. Effects of atmospheric CO₂ enrichment on soil CO₂ efflux in a young longleaf pine system. *International Journal of Agronomy* Volume 2012 (2012), Article ID 549745, 9 pages.
- Clinton, B. D., C. A. Maier, C. R. Ford, and R. J. Mitchell. 2011. Transient changes in transpiration, and stem and soil CO₂ efflux in longleaf pine (*Pinus palustris* Mill.) following fire-induced leaf area reduction. *Trees* 25:997-1007.
- Loudermilk, E. L., W. P. Cropper, Jr., R. J. Mitchell, and H. Lee. 2011. Longleaf pine (*Pinus palustris*) and hardwood dynamics in a fire-maintained ecosystem: A simulation approach. *Ecological Modelling* 222:2733-2750.
- Jack, S. B., J. K. Hiers, R. J. Mitchell and J. L. Gagnon. 2010. [Fuel loading and fire intensity - effects on longleaf pine seedling survival](#). Pages 275-279 in J. A. Stanturf (ed.). *Proceedings of the 14th Biennial Southern Silvicultural Research Conference*. General Technical Report SRS-121. USDA, Forest Service, Southern Research Station, Asheville, North Carolina.
- McCormack, M., S. Pritchard, S. Breland, M. A. Davis, S. A. Prior, G. B. Runion, R. J. Mitchell and H. H. Rogers. 2010. Soil fungi respond more strongly than fine roots to elevated CO₂ in a model regenerating longleaf pine-wiregrass ecosystem. *Ecosystems* 13:901-916.
- McIntyre, K., B. B. McCall, S. Jack and R. J. Mitchell. 2010. Financial feasibility of selection-based multiple-value management on private lands in the South: a heuristic case study approach. *Journal of Forestry* 108:230-237.
- Mitchell, R. J., J. K. Hiers, J. J. O' Brien, S. B. Jack and R. T. Engstrom. 2010. [Corrigendum: silviculture that sustains: the nexus between silviculture, frequent prescribed fire, and conservation of biodiversity in longleaf pine forests of the southeastern United States](#). *Canadian Journal of Forest Research* 40:596. Reproduced with permission of the National Research Council Press © 2010.
- O'Brien, J. J., J. K. Hiers, R. J. Mitchell, J. M. Varner III and K. Mordecai. 2010. Acute physiological stress and mortality following fire in a long-unburned longleaf pine ecosystem. *Fire Ecology* 6(2):1-12. doi: 4996/fireecology.0602001.

- Runion, G. B., S. A. Prior, H. H. Rogers and R. J. Mitchell. 2010. Effects of elevated atmospheric CO₂ on two southern forest diseases. *New Forests* 39:275-285.
- Hiers, J. K., J. J. O'Brien, R. J. Mitchell, J. M. Greggo and E. L. Loudermilk. 2009. The wildland fuel cell concept: an approach to characterize fine-scale variation in fuels and fire in frequently burned longleaf pine forests. *International Journal of Wildland Fire* 18:315-325.
- Loudermilk, E. L., J. K. Hiers, J. J. O'Brien, R. J. Mitchell, A. Singhanian, J. C. Fernandez, W. P. Cropper and K. C. Slatton. 2009. Ground-based LIDAR: a novel approach to quantify fine-scale fuelbed characteristics. *International Journal of Wildland Fire* 18:676-685.
- Mitchell, R. J. and S. L. Duncan. 2009. Range of variability in southern coastal plain forests: its historical, contemporary, and future role in sustaining biodiversity. *Ecology and Society* 14 (1): 17.[online] URL: <http://www.ecologyandsociety.org/vol14/iss1/art17/>
- Mitchell, R., T. Engstrom, R. R. Sharitz, D. De Steven, K. Hiers, R. Cooper and L. K. Kirkman. 2009. Old forests and endangered woodpeckers: old-growth in the southern Coastal Plain. *Natural Areas Journal* 29:301-310.
- Mitchell, R. J., J. K. Hiers, J. O'Brien and G. Starr. 2009. [Ecological forestry of the southeast: understanding the ecology of fuels](#). *Journal of Forestry* 107:391-397.
- Varner, J. M., F. E. Putz, J. J. O'Brien, J. K. Hiers, R. J. Mitchell and D. R. Gordon. 2009. Post-fire tree stress and growth following smoldering duff fires. *Forest Ecology and Management* 258:2467-2474.
- Ford, C. R., R. J. Mitchell and R. O. Teskey. 2008. [Water table depth affects productivity, water use, and the response to nitrogen addition in a savanna system](#). *Canadian Journal of Forest Research* 38:2118-2127. Reproduced with permission of the National Research Council Press © 2008.
- Guo, D., H. Li, R. J. Mitchell, W. Han, J. J. Hendricks, T. J. Fahey and R. J. Hendrick. 2008. Fine root heterogeneity by branch order: exploring the discrepancy in root turnover estimates between minirhizotron and carbon isotopic methods. *New Phytologist* 177:443-456.
- Guo, D., R. J. Mitchell, J. M. Withington, P. P. Fan and J. J. Hendricks. 2008. Endogenous and exogenous controls of root life span, mortality and nitrogen flux in a longleaf pine forest: root branch order predominates. *Journal of Ecology* 96:737-745.

- O'Brien J. J., J. K. Hiers, M. A. Callaham, Jr., R. J. Mitchell and S. B. Jack. 2008. Interactions among overstory structure, seedling life-history traits, and fire in frequently burned neotropical pine forests. *AMBIO* 37:542-547.
- Hiers, J. K. and R. J. Mitchell. 2007. The influence of burning and light availability on N₂-fixation of native legumes in longleaf pine savannas. *Journal of the Torrey Botanical Society* 134:398-409.
- Hiers, J. K., J. J. O'Brien, R. E. Will and R. J. Mitchell. 2007. [Forest floor depth mediates understory vigor in xeric *Pinus palustris* ecosystems](#). (Erratum). *Ecological Applications* 17:1257. Reproduced with permission of the Ecological Society of America © 2007.
- Hiers, J. K., J. J. O'Brien, R. E. Will, and R. J. Mitchell. 2007. [Forest floor depth mediates understory vigor in xeric *Pinus palustris* ecosystems](#). *Ecological Applications* 17:806-814. Reproduced with permission of the Ecological Society of America © 2007.
- Kirkman, L. K., R. J. Mitchell, M. J. Kaeser, S. D. Pecot and K. L. Coffey. 2007. The perpetual forest: using undesirable species to bridge restoration. *Journal of Applied Ecology* 44:604-614.
- Pecot, S. D., R. J. Mitchell, B. J. Palik, E. B. Moser and J. K. Hiers. 2007. [Competitive responses of seedlings and understory plants in longleaf pine woodlands: separating canopy influences above and below ground](#). *Canadian Journal of Forest Research* 37:634-648. Reproduced with permission of the National Research Council Press © 2007.
- Sims, S. E., J. J. Hendricks, R. J. Mitchell, K. A. Kuehn and S. D. Pecot. 2007. Nitrogen decreases and precipitation increases ectomycorrhizal extramatrical mycelia production in a longleaf pine forest. *Mycorrhiza* 17:299-309.
- Addington, R. N., L. A. Donovan, R. J. Mitchell, J. M. Vose, S. D. Pecot, S. B. Jack, U. G. Hacke, J. S. Sperry and R. Oren. 2006. Adjustments in hydraulic architecture of *Pinus palustris* maintain similar stomatal conductance in xeric and mesic habitats. *Plant, Cell and Environment* 29:535-545.
- Hendricks, J. J., R. L. Hendrick, C. A. Wilson, R. J. Mitchell, S. D. Pecot and D. Guo. 2006. Assessing the patterns and controls of fine root dynamics: an empirical test and methodological review. *Journal of Ecology* 94:40-57.
- Hendricks, J. J., R. J. Mitchell, K. A. Kuehn, S. D. Pecot and S. E. Sims. 2006. Measuring external mycelia production of ectomycorrhizal fungi in the field: the soil matrix matters. *New Phytologist* 171:179-186.

- Kirkman, L. K. and R. J. Mitchell. 2006. Conservation management of *Pinus palustris* ecosystems from a landscape perspective. *Applied Vegetation Science* 9:67-74.
- Mitchell, R. J., J. K. Hiers, J. J. O'Brien, S. B. Jack and R. T. Engstrom. 2006. [Silviculture that sustains: the nexus between silviculture, frequent prescribed fire, and conservation of biodiversity in longleaf pine forests of the southeastern United States.](#) *Canadian Journal of Forest Research* 36:2724-2736. Reproduced with permission of the National Research Council Press © 2006.
- Runion, G. B., M. A. Davis, S. G. Pritchard, S. A. Prior, R. J. Mitchell, H. A. Torbert, H. H. Rogers and R. R. Dute. 2006. [Effects of elevated atmospheric carbon dioxide on biomass and carbon accumulation in a model regenerating longleaf pine community.](#) *Journal of Environmental Quality* 35:1478-1486.
- Schulte, L. A., R. J. Mitchell, M. L. Hunter, Jr., J. F. Franklin, R. K. McIntyre and B. J. Palik. 2006. Evaluating the conceptual tools for forest biodiversity conservation and their implementation in the U.S. *Forest Ecology and Management* 232:1-11.
- Cheng, W., F. Shenglei, R. B. Susfalk and R. J. Mitchell. 2005. Measuring tree root respiration using ^{13}C natural abundance: rooting medium matters. *New Phytologist* 167:297-307.
- Ford, C. R., C. E. Goranson, R. J. Mitchell, R. E. Will and R. O. Teskey. 2005. Modeling canopy transpiration using times series analysis: a case study illustrating the effect of soil moisture deficit on *Pinus taeda*. *Agricultural and Forest Meteorology* 130:163-175.
- Pecot, S. D., S. B. Horsley, M. A. Battaglia and R. J. Mitchell. 2005. [The influence of canopy, sky condition, and solar angle on light quality in a longleaf pine woodland.](#) *Canadian Journal of Forest Research* 35:1356-1366. Reproduced with permission of the National Research Council Press © 2005.
- Addington, R. N., R. J. Mitchell, R. Oren and L. A. Donovan. 2004. Stomatal sensitivity to vapor pressure deficit and its relationship to hydraulic conductance in *Pinus palustris*. *Tree Physiology* 24:561-569.
- Boring, L. R., C. A. Wilson, J. J. Hendricks and R. J. Mitchell. 2004. Season of burn and nutrient losses in a longleaf pine ecosystem. *International Journal of Wildland Fire* 13:443-453.
- Carter, D. C., J. J. Hendricks, R. J. Mitchell and S. D. Pecot. 2004. Fine root carbon allocation and fates in longleaf pine forests. *Forest Science* 50:177-187.

- Ford, C. R., C. E. Goranson, R. J. Mitchell, R. E. Will and R. O. Teskey. 2004. Diurnal and seasonal variability in the radial distribution of sap flow: predicting total stem flow in *Pinus taeda* trees. *Tree Physiology* 24:951-960.
- Ford, C. R., M. A. McGuire, R. J. Mitchell and R. O. Teskey. 2004. Assessing variation in the radial profile of sap flux density in *Pinus* species and its effect on daily water use. *Tree Physiology* 24:241-249.
- Guo, D., R. J. Mitchell and J. J. Hendricks. 2004. Fine root branch orders respond differentially to carbon source-sink manipulations in a longleaf pine forest. *Oecologia* 140:450-457.
- Guo, D., P. Mou, R. H. Jones and R. J. Mitchell. 2004. Spatio-temporal patterns of soil available nutrients following experimental disturbance in a pine forest. *Oecologia* 138:613-621.
- Hendricks, J. J., R. J. Mitchell, K. M. Green, T. L. Crocker and J. G. Yarbrough. 2004. Assessing the nitrogen-15 concentration of plant-available soil nitrogen. *Communications in Soil Science and Plant Analysis* 35:1207-1217.
- Kirkman, L. K., K. L. Coffey, R. J. Mitchell and E. B. Moser. 2004. Ground cover recovery patterns and life history traits: Implications for restoration obstacles and opportunities in a species-rich savanna. *Journal of Ecology* 92:409-421.
- Battaglia, M. A., R. J. Mitchell, P. P. Mou and S. D. Pecot. 2003. Light transmittance estimates in a longleaf pine woodland. *Forest Science* 49:752-762.
- Jones, R. H., R. J. Mitchell, G. N. Stevens and S. D. Pecot. 2003. Controls of fine root dynamics across a gradient of gap sizes in a pine woodland. *Oecologia* 134:132-143.
- Palik, B. J., R. J. Mitchell, S. D. Pecot, M. A. Battaglia and P. P. Mou. 2003. [Spatial distribution of overstory retention influences resources and growth of longleaf pine seedlings](#). *Ecological Applications* 13:674-686. Reproduced with permission of the Ecological Society of America © 2003.
- Battaglia, M. A., P. Mou, B. J. Palik and R. J. Mitchell. 2002. [The effect of spatially variable overstory on the understory light environment of an open-canopied longleaf pine forest](#). *Canadian Journal of Forest Research* 32:1984-1991. Reproduced with permission of the National Research Council Press © 2002.
- Davis, M. A., S. G. Pritchard, R. J. Mitchell, S. A. Prior, H. H. Rogers and G. B. Runion. 2002. Elevated atmospheric CO₂ affects structure of a model regenerating longleaf pine community. *Journal of Ecology* 90:130-140.

- Guo, D., P. Mou, R. H. Jones and R. J. Mitchell. 2002. Temporal changes in spatial patterns of soil moisture following disturbance: an experimental approach. *Journal of Ecology* 90:338-347.
- Kirkman, L. K. and R. J. Mitchell. 2002. A forest gap approach to restoring longleaf pine-wiregrass ecosystems (Georgia and Florida). *Ecological Restoration* 20:50-51.
- Mulligan, M. K., L. K. Kirkman and R. J. Mitchell. 2002. *Aristida beyrichiana* (wiregrass) establishment and recruitment: implications for restoration. *Restoration Ecology* 10:68-72.
- Palik, B. J., R. J. Mitchell and J. K. Hiers. 2002. Modeling silviculture after natural disturbance to sustain biodiversity in the longleaf pine (*Pinus palustris*) ecosystem: balancing complexity and implementation. *Forest Ecology and Management* 155:347-356.
- Stevens, G. N., R. H. Jones and R. J. Mitchell. 2002. [Rapid fine root disappearance in a pine woodland: a substantial carbon flux](#). *Canadian Journal of Forest Research* 32:2225-2230. Reproduced with permission of the National Research Council Press © 2002.
- Wilson, C. A., R. J. Mitchell, L. R. Boring and J. J. Hendricks. 2002. Soil nitrogen dynamics in a fire-maintained forest ecosystem: results over 3-year burn interval. *Biochemistry* 34:679-689.
- Kirkman, L. K., R. J. Mitchell, R. C. Helton and M. B. Drew. 2001. [Productivity and species richness across an environmental gradient in a fire-dependent ecosystem](#). *American Journal of Botany* 88:2119-2128.
- McGuire, J. P., R. J. Mitchell, E. B. Moser, S. D. Pecot, D. H. Gjerstad and C. W. Hedman. 2001. [Gaps in a gappy forest: plant resources, longleaf pine regeneration, and understory response to tree removal in longleaf pine savannas](#). *Canadian Journal of Forest Research* 31:765-778. Reproduced with permission of the National Research Council Press © 2001.

Selected Miscellaneous Ecological Forestry Publications:

- Franklin, J. F., R. J. Mitchell and B. J. Palik. 2007. [Natural disturbance and stand development principles for ecological forestry](#). General Technical Report NRS-19. USDA Forest Service, Northern Research Station, Newtown Square, Pennsylvania.

McIntyre, R. K., S. B. Jack, R. J. Mitchell, J. K. Hiers and W. L. Neel. 2008. Multiple Value Management: The Stoddard-Neel Approach to Ecological Forestry in Longleaf Pine Grasslands. Miscellaneous publication of the J. W. Jones Ecological Research Center.

Jack, S. B., W. L. Neel and R. J. Mitchell. 2006. The Stoddard-Neel approach: A conservation-oriented approach (invited contribution). Pages 242-245 in S. Jose, E. Jokela, and D. Miller (eds.). The Longleaf Pine Ecosystem: Ecology, Silviculture, and Restoration. Springer, New York, New York.

Competitive Grants (2000-2012):

Hiers, J. K., R. J. Mitchell and C. B. Clements. In situ measures of fire-atmospheric dynamics: Implications for PM 2.5 production and dispersion. Environmental Protection Agency. June 1, 2008 – May 31, 2010. \$70,000. Received in 2008, \$26,404. Received in 2009, \$43,596. Did not receive any funds in 2010.

Jackson, S. T., R. J. Mitchell and others. National Geographic Society. Did pre-Columbian societies influence regional ecosystem structure in the southeastern United States? \$19,950. June 01, 2009 – May 30, 2012.

Mitchell, R. J., E. A. Hobbie and C. R. Ford. Does increased precipitation alter belowground allocation and carbon storage by fine roots and mycorrhizal fungi in pinesavannas? DOE, National Institute for Climate Change Research, Duke University. March 1, 2008 – November 30, 2011. \$375,000. Received in 2011, \$23,898.

Mitchell, R. J., L. K. Kirkman, L. M. Conner, L. L. Smith, J. Priddy, P. Yates, M. C. Mack, J. R. Walters and R. D. Sutter. Developing dynamic reference models and a decision support framework for southeastern ecosystems: An integrated approach. Strategic Environmental Research and Development Program. March 26, 2009 – March 25, 2014. \$1,351,138. Received in 2011, \$344,888.

Mitchell, R. J. and L. Wayburn. Working forests in a changing climate: Creating a pilot forestry offset process for frequently burned longleaf pine in Georgia. R. Howard Dobbs, Jr. Foundation. June 1, 2009 – May 31, 2010. \$8,500. Received in 2009, \$5,160. Received in 2010, \$3,340.

Mitchell, R. J., J. J. Hendricks, K. A. Kuehn and J. J. O'Brien. United States Department of Agriculture. Carbon fine root allocation and transfer at ecosystem scales: root architecture, mycorrhizae and stored carbon regulation of belowground dynamics. \$440,000. January 01, 2006 – December 31, 2008.

- Mitchell, R. J. National Commission on Science for Sustainable Forestry. Old growth forest and conservation in the southeastern U.S. \$30,000. July 01, 2005 – June 30, 2006.
- Mitchell, R. J., K. N. Johnson and S. Duncan. National Commission on Science for Sustainable Forestry, Oregon State University. Future range of variability. \$15,000. February 02, 2006 – September 30, 2006.
- McIntyre K., R. J. Mitchell and S. B. Jack. Doris Duke Foundation Lowcountry Forest Conservation Project. \$117,657. October 01, 2003 – September 30, 2006.
- Mitchell, R.J., R. K. McIntyre, M. L. Hunter, Jr., J. F. Franklin, B. J. Palik, T. R. Crow and L. A. Schulte. National Commission on Science for Sustainable Forestry. Calibrating conservation theory with practice. \$99,725. July 01, 2003 – June 30, 2004.
- Mitchell, R. J., L. K. Kirkman, L. L. Smith, R. T. Engstrom, B. J. Palik, M. L. Hunter, Jr. and J. F. Franklin. National Commission on Science for Sustainable Forestry. Use of natural disturbance to guide restoration silviculture. \$199,437. July 01, 2002 – June 30, 2003.
- Mitchell, R. J., J. K. Heirs, D. Wade and D. Gordon. United States Department of Agriculture. Duff consumption and southern pine mortality. \$28,500. March 01, 2002 – August 02, 2004.
- Mitchell, R. J. and P. P. Mou. United States Department of Agriculture, University of North Carolina. Forest site heterogeneity dynamics and their interactions with the forest. \$13,580. December 01, 2000 – October 30, 2003.
- Mitchell, R. J., J. J. Hendricks and M. L. Hunter, Jr. United States Department of Agriculture, University of West Georgia. Nitrogen controls on belowground carbon allocation at ecosystem scales. \$240,000. September 01, 2000 – February 28, 2004.
- Mitchell, R. J., B. J. Palik, R. H. Jones and P. P. Mou. United States Department of Agriculture. Overstory structure and regeneration processes in longleaf pine ecosystems. \$445,000. December 15, 1997 – June 30, 2000.

Pending Grants:

Mitchell, R. J., G. Starr, B. Mortazavi, S. F. Oberbauer, J. J. O'Brien, M. A. Callaham, J. Butnor, V. Compton, E. A. Hobbie, C. R. Ford, S. Ollinger, M. Williams, C. L. Staudhammer and M. E. Martin. Strategic Environmental Research and Development Program. Ecological management of carbon in fire-dependent pine savannas of the Southeastern US: Understanding pace, pattern, and regulatory controls through empirical studies and models. \$5,257,172. March 01, 2011 – January 01, 2016.

Mortazavi, B., R. J. Mitchell, G. Starr and C. L. Staudhammer. DOE, North American Carbon Program. Carbon sequestration in a high frequency fire ecosystem: How the interactions between fire and soil moisture availability control capacity. \$845,632. October 01, 2011 – September 30, 2014.

Longterm Research Internally Funded Projects:

Mitchell, R. J., S. B. Jack, R. K. McIntyre, L. K. Kirkman, L. L. Smith and L. M. Conner. Ecological forestry project: Silviculture that sustains and restores native biodiversity of pinelands in the Southeastern Coastal Plain: Legacies, fire and recovery periods.

Mitchell, R. J., L. K. Kirkman, L. R. Boring and L. M. Conner. Productivity and biodiversity patterns: Controls in a southeastern coastal plain landscape (the forest productivity project).

Recent Student Advisement:

Jesse Canfield. Current. A fast-running physics-based model for coupled atmosphere fire behavior: Model development and comparison with experimental field data. Ph.D., Florida State University, Tallahassee, Florida. (Co-advisor with Doran Nof).

Matt Dittler. Current. Fine root herbivory by belowground beetle larvae and consequences for fine root productivity: An assessment of herbivore distribution, temporal dynamics and fine root consumption in a longleaf pine-wiregrass ecosystem. M.S. Virginia Polytechnic Institute and State University, Blacksburg, Virginia. (Co-advisor with Bob Jones).

Andy Whelan. Current. The interaction of soil moisture availability and prescribed fire on the exchange of carbon dioxide, energy and water in longleaf pine forests. M.S., University of Alabama, Tuscaloosa, Alabama. (Co-advisor with Greg Starr).

- Jenny Wright. Current. The influence of fire regime on carbon cycling in pine grassland savannas of the southeastern U.S. Ph.D., University of Edinburgh, Edinburgh, Scotland. (Co-advisor with Matt Williams).
- Douglas P. Aubrey. 2011. Stored carbon decouples soil CO₂ efflux in chronically disturbed ecosystems. Ph.D., University of Georgia, Athens, Georgia. (Co-advisor with Bob Teskey).
- Eva L. Loudermilk. 2010. Linking plant demography, forest fuels, and fire in longleaf pine (*pinus palustris*) savannas using lidar remote sensing and simulation modeling. Ph.D., University of Florida, Gainesville, Florida. (Co-advisor with Wendell Cropper).
- Noah A. Jansen. 2007. Influence of root branching order on fine root substrate quality and decomposition in a *pinus palustris* ecosystem. M.S., School of Forestry and Conservation, University of Florida, Gainesville, Florida. (Co-advisor with Dr. Jose Shibu).
- Chelcy R. Ford. 2004. Variable distributions of water as a transpiration source: consequences from the tree stem to ecosystem functioning. Ph.D., Warnell School of Forest Resources, University of Georgia, Athens, Georgia. (Co-advisor with Dr. Bob Teskey).