

SUMMARY CURRICULUM VITAE 2007

L. Katherine Kirkman

Associate Scientist



Dr. Kirkman's current research is focused on plant ecology and conservation management of the longleaf pine ecosystem and embedded wetlands. Her specific interests include vegetation dynamics in response to disturbance, restoration of species diversity of the native ground cover, and conservation biology of rare plant species. She is involved in related education and outreach efforts through a cooperative outreach project for private landowners, agency land managers, and commercial interests. This partnership is designed to stimulate supply and demand of native plant seed for restoration as well as demonstration of restoration practices.

Education:

PhD in Botany, University of Georgia, Athens, GA, 1992
MS in Botany, University of Georgia, Athens, GA, 1978
BS in Biology, College of William and Mary, Williamsburg, VA, 1976

Professional Experience:

1999-present: Associate Scientist, Joseph W. Jones Ecological Research Center
1995-1999: Assistant Scientist, Joseph W. Jones Ecological Research Center
1992-1995: Adjunct Ecologist, Institute of Ecology, University of Georgia, (position located at J. W. Jones Ecological Research Center)

Adjunct Faculty Appointments:

Adjunct Faculty, Department of Botany, University of Florida, Gainesville, FL
Adjunct Faculty, Department of Wildlife and Conservation, University of Florida, Gainesville, FL
Affiliate Faculty, School of Forestry, Auburn University, Auburn University, AL
Affiliate Faculty, Dept. of Biological Sciences, Auburn University, Auburn University, AL
Courtesy Graduate Faculty, University of Georgia Institute of Ecology, Athens, GA

Professional Affiliations:

The Ecological Society of America
Society of Wetland Scientists
Association of Southeastern Biologists

Recent Research Publications: (past 5 years):

Kirkman, LK, CL Brown and D Leopold. 2007. *Native Trees of the Southeast*. Timber Press, Portland, OR.

Kirkman, LK, RJ Mitchell, MJ Kaeser, SD Pecot and KL Coffey. 2007. [The perpetual forest: using undesirable species to bridge restoration](#). Journal of Applied Ecology 44:604-614.

Coffey, KL and LK Kirkman. 2006. [Seed germination strategies of species with restoration potential in a fire-maintained pine savanna](#). Natural Areas Journal 26:289-299.

Kirkman, LK and RJ Mitchell. 2006. Conservation management of *Pinus palustris* ecosystems from a landscape perspective. Applied Vegetation Science 9:67-74.

Aleric, KM and LK Kirkman. 2005. [Growth and photosynthetic responses of the federally endangered shrub, *Lindera melissifolia* \(Lauraceae\), to varied light environments](#). American Journal of Botany 92:682-689.

Kirkman, LK, KL Coffey, RJ Mitchell and EB 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.

Kirkman, LK, PC Goebel, BJ Palik and L West. 2004. Predicting plant species diversity in a longleaf pine landscape. Ecoscience 11:80-93.

Norden, AH and LK Kirkman. 2004. Factors controlling the fire-induced flowering response of *Schwalbea americana* L. (Scrophulariaceae). Journal of the Torrey Botanical Society 131:16-22.

Norden, AH and LK Kirkman. 2004. [Persistence and prolonged winter dormancy of the *Schwalbea americana* L. \(Scrophulariaceae\) following experimental management techniques](#). Natural Areas Journal 24:129-134.

Norden, AH and LK Kirkman. 2004. [Herbivory of the federally endangered *Schwalbea americana*](#). Castanea 69:67-68.

Mulligan, MK and LK Kirkman. 2002. Burning influences on wiregrass (*Aristida beyrichiana*) restoration plantings: natural seedling recruitment and survival. Restoration Ecology 10:334-339.

Mulligan, MK and LK Kirkman. 2002. Competition effects on wiregrass (*Aristida beyrichiana*) growth and survival. *Plant Ecology* 167:39-50.

Mulligan, MK, LK Kirkman and RJ Mitchell. 2002. *Aristida beyrichiana* (wiregrass) establishment and recruitment: implications for restoration. *Restoration Ecology* 10:68-76.

Kirkman, LK, RJ Mitchell, RC Helton and MB Drew. 2001. [Productivity and species richness across an environmental gradient in a fire-dependent ecosystem](#). *American Journal of Botany* 88:2119-2128.

Kirkman, LK, PC Goebel, L West, MB Drew and BJ Palik. 2000. Depressional wetland vegetation types: a question of plant community development. *Wetlands* 20:373-385.

Outreach publications and Report to Natural Resource Agencies: (Past 5 years)

Norden, H and K Kirkman. 2006. *Field Guide to Common Legume Species of the Longleaf Pine Ecosystem*. Published by the National Fish and Wildlife Foundation and the Georgia Native Plant Society.

Mitchell, RJ, JK Hiers, RT Engstrom, LK Kirkman, J Hill, RT Sharitz and R Cooper. 2006. Report to the National Council of Science and Sustainable Forestry on Old-Growth Forests and Conservation of Biodiversity of the Southeast.

Kirkman K. 2005. [Conserving biodiversity in the longleaf pine savannas of the USA](#). *Plant Talk* 35:30-32.

Coffey, KL and LK Kirkman. 2004. Native ground covers partners: reestablishing native ground cover in longleaf pine savannas (Georgia). *Ecological Restoration* 22:288-289.

Kirkman, LK and RJ Mitchell. 2002. A forest gap approach to restoring longleaf pine-wiregrass ecosystems (Georgia and Florida). *Ecological Restoration* 20:50-51.

Engstrom, T, LK Kirkman and RJ Mitchell. 2001. Natural History of the Fire Forest - the Longleaf Pine-wiregrass Ecosystem. Pages 5-18 In: *The Fire Forest - the Longleaf Pine-wiregrass Ecosystem*, Georgia Wildlife Federation.

Current Jones Center Research:

Depressional wetlands in the Coastal Plain Landscape

Productivity and Biodiversity Patterns: Controls in a Southeastern Coastal Plain Landscape

Silviculture that Sustains and Restores Native Biodiversity of Pinelands in the Southeastern Coastal Plain: Legacies, Fire and Recovery Periods.

Grants and Contracts (Past 5 years):

Kirkman, LK and K McIntyre. Longleaf pine understory restoration IV. National Fish and Wildlife Foundation. Budget: \$82,000. 2008-2010.

Kirkman, LK and LM Conner. Longleaf pine understory restoration III. National Fish and Wildlife Foundation. Budget: \$196,000. 2007-2010.

Kirkman, LK. Longleaf pine understory restoration II. National Fish and Wildlife Foundation. Budget: \$85,355. 2005-2007.

Kirkman, LK. Longleaf pine understory restoration I. National Fish and Wildlife Foundation. Budget: \$50,000. 2003-2005.

Smith, LL and LK Kirkman. Coastal plain ecosystems – Ecology and conservation management. Georgia Department of Natural Resources – Nongame Wildlife & Natural Heritage Section. Budget: \$1008. 2005.

Mitchell, RJ, LK Kirkman, L Smith, RT Engstrom, JF Franklin, BJ Palik, ML Hunter. Use of Natural Disturbances to guide restoration silviculture. National commission on science for sustainable forestry (NCSSF). Budget: \$ 124,394 to Jones Center (total grant = \$199,438). 2002-2003.

Recent Student Advisement:

Katie Stuble. Current. The role of ant dispersal in the vegetation dynamics of the longleaf pine ecosystem. MS Thesis. Institute of Ecology, University of Georgia, Athens, GA (Co-advisor with R. Carroll).

Gwen Iacona. Current. Resource limitations and species richness in the longleaf pine ecosystem: the regeneration niche. Department of Wildlife and Conservation, University of Florida, Gainesville, Florida (Co-advisor with E. Bruna).

Scott Wiggers. Current. Reproductive output of legumes species in response to fuel conditions in the longleaf pine ecosystem. MS Thesis. Department of Biological Sciences, Auburn University, Auburn, AL (Co-advisor with R. Boyd).

Michelle Creech. Current. Institute of Ecology, University of Georgia, Athens, Georgia Physical, Chemical and Biological impacts of slash pile burns on ground cover restoration of the longleaf pine ecosystem. MS Thesis. (Co-advisor with Ron Carroll).

- Katie Martin. 2006. Institute of Ecology, University of Georgia, Athens, Georgia. Restoration of fire-dependent depression wetlands. MS Thesis. (Co-advisor with Ron Carroll).
- Katherine Aleric. 2004. Institute of Ecology, University of Georgia, Athens, Georgia. Responses to varied light environments and propagation techniques of the federally endangered shrub, *Lindera melissifolia* (Lauraceae). MS Thesis. (Co-advisor with L Donovan).
- Heather Norden. 2002. Institute of Ecology, University of Georgia, Athens, Georgia. Species biology and life history of the federally endangered *Schwalbea americana* L.(Scrophulariaceae). MS Thesis. (Co-advisor with R. Carroll).
- Maureen Mulligan. 2000. Institute of Ecology, University of Georgia, Athens, Georgia. Wiregrass (*Aristida beyrichiana* Trin and Rupr.) recruitment, establishment, and growth. MS Thesis. (Co-advisor with Ron Carroll).