

**W. Dale Greene**

Professor

Daniel B. Warnell School of Forestry & Natural Resources

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**Professional Expertise**

Forest operations and timber harvesting

**Education**

Ph.D. 1986. Auburn University

M.S. 1983. Virginia Polytechnic Institute & State University

B.S. 1981. Louisiana State University

**Experience**

Faculty Member, Warnell School of Forestry & Natural Resources, University of Georgia, Athens.

Research and teaching of timber harvesting and forest operations topics.

Visiting Scientist, Harvesting Research Project, Forest Science Laboratory, Westvaco Corporation,

Summerville, SC. (1992-1993) Wood flow and cost reduction to Westvaco mills in South Carolina.

**Awards and Recognitions**

## **Professional Service & University Governance**

### University

Meigs Distinguished Professor Selection Committee, 2010-2011  
Academic Dishonesty Panel Member, since 2004  
Curriculum Committee, 2000-02  
University Council Elected Member, 1990-93, 1996-99  
University Council Executive Committee, 1996-97  
Faculty Admissions Committee, 1993-97 (Chair – 1996-97)  
Ad-Hoc Enrollment Management Committee, 1995-96  
Faculty Affairs Committee, 1991-93  
Facilities Committee, 1991-93

### Promotion & Tenure

University Review Committee, 2006-2009 (Chair – 2008-09)  
University Appeals Committee, 1998-2001

### Warnell Standing Committees

Administrative  
Curriculum (Chair since 2006)  
Lands (Chair 1992-95)  
Research Coordination & Review  
Teaching Effectiveness (Chair 1998-2000)  
Undergraduate Affairs

### Service to the Forestry Community

Georgia Forestry Association  
Board of Directors since 1992  
Treasurer, 1993-2001  
Georgia Forestry Foundation  
Treasurer, 2006-2008  
Georgia State Board of Registration for Foresters  
Appointed by Governor Perdue 2004, reappointed 2010  
Chair, 2007, 2008, 2014  
Georgia Registered Forester #1975  
Council on Forest Engineering  
National Chair 1993 and 2008, Southern Chair 1990

## **Continuing Education Shortcourses**

Logging Cost Analysis  
Harvest Planning & Layout  
Thinning Methods and Operations  
Cost Analysis for Logging Contractors  
USDA Forest Service Sale Layout and Harvesting Institute (SALHI)

## Graduate Students

Amyas Player	MS	1991	Coastal Lumber Company, NC
Kevin Lewis	MS	1991	Georgia-Pacific, Warrenton, GA
Chris Miller	MS	1991	Physical Therapist
Martha Baxter	MS	1994	USMC Logistics Base, Albany, GA
Jingxin Wang	PhD	1997	Professor, West Virginia University
Jack Culpepper	MFR	1998	U.S. Fish & Wildlife Service, NC
Bart Rash	MFR	1998	International Paper Co., Pine Bluff, AR
Chris Sewell	MFR	1998	Henry County, GA Science Teacher
Scott Mooney	MFR	1999	The Conservation Fund, Atlanta, GA
Brian Stone	MFR	2001	Forest Resource Consultants, Macon, GA
Olly Halleux	MS	2001	Rayonier, Invercargill, New Zealand
Glenn Tott	MFR	2001	First Forest GmbH, Munich, Germany
James Chumbler	MS	2002	Rayonier Inc., Eatonton, GA
James Ulmer	MS	2002	Forestry Investment Associates, Atlanta
James Baxter	MFR	2002	Financial Consultant
Ian Conradie	MS	2003	Forestry Consultant, Santiago, Chile
Stephen Box	MFR	2003	American Forest Management Inc., NC
Jeff Tyler	MFR	2003	Timberland Harvesters Inc., GA
Ret Tiner	MFR	2005	RockTenn, Panama City, FL
Roger Grizzell	MFR	2005	Accountant, Atlanta, GA
Matthew Haun	MFR	2005	Real Estate and Forestry Consulting, GA
Wes Shiver	MFR	2006	Forestry Consultant, GA
Ashley Dillard	MFR	2006	Owner, Five-Star Auto, Athens, GA
Andrew Saunders	MFR	2007	Athens Clarke County urban forester, GA
Jay Chupp	MFR	2007	F&W Forestry Services, Albany, GA
Michael Westbrook	MS	2008	Westerfelt Company, Statesboro, GA
Amanda Hamsley Lang	MS	2008	Forisk Consulting, Athens, GA
Jason Kinsey	MFR	2008	Plum Creek Timber, Crossett, AR
Randy Cass	MFR	2009	ForesTech International, Athens, GA
Alan Smith	MFR	2009	Youth Minister, Valdosta State University
Addison Aman	MS	2010	International Paper Co., Riverdale, AL
Arthur Williams	MFR	2011	Self-employed forester, Madison, GA
Derek Stanfield	MFR	2011	
Andres Enrich	MFR	2011	TimberWest, Nanaimo, BC, Canada
Jason Cutshall	PhD	2012	Cutshall Logging Inc., Iuka, MS
Cory Dukes	MS	2012	Timberland Investment Resources, GA
Scott Corley	MFR	2012	Alabama Power Company
Reid Yates	MFR	2012	Foley Timber & Land, Perry, FL
Samantha Marchman	MFR	2013	Plum Creek Timber, Crossett, AR
Tim Smith	MFR	2013	Timber-Mart South, Athens, GA
Miles Spong	MFR	2014	Bureau of Land Mgt, Canon City, CO
Erik Biang	MFR	2014	Georgia-Pacific, Palatka, FL
Shawn Baker	PhD	current	
Robert McDade	MFR	current	
Matthew Gaw	MFR	current	
Andrew Carroll	MFR	current	
Nicki Price	MFR	current	

## Refereed Publications

- Zhao, D., M. Kane, D. Markewitz, D. Greene, R. Teskey, B. Borders. *In Press*. Energy, carbon and nutrient concentrations and contents in aboveground biomass components of mid-rotation loblolly pine plantations. *Annals of Forest Science*. (accepted 4/28/14).
- Baker, S.A., J. Siry and W.D. Greene. *In press*. Capacity changes in the southern logging industry between 2006 – 2012. *Forest Products Journal*. (accepted 3/17/14).
- Cutshall, J.B., W.D. Greene, and S.A. Baker. *In press*. Improving woody biomass feedstock logistics by reducing ash and moisture content. *BioEnergy Research*. (accepted 12/26/13).
- Baker, S.A., B. Mei, T.G. Harris, Jr., and W.D. Greene. 2014. An index for logging cost changes across the US South. *Journal of Forestry* 112(3): 296-301.
- Cutshall, J.B., W.D. Greene, and S.A. Baker. 2013. Transpirational drying effects on energy and ash content from whole-tree southern pine plantation chipping operations. *Southern Journal of Applied Forestry* 37(3): 133-139.
- Dukes, C.C., S.A. Baker, and W.D. Greene. 2013. In-wood grinding and screening of forest residues for biomass feedstock applications. *Biomass & Bioenergy* 54: 18-26.
- Greene, W.D. 2012. Challenges in the southern US forest industry and comparisons with New Zealand. *New Zealand Journal of Forestry* 57(3): 31-34.
- Baker, S.A., W.D. Greene, and A. Wilson. 2012. Fuels characteristics of woods-run whole tree southern pine chips. *Biomass & Bioenergy* 37: 67-72.
- Subedi, S., M. Kane, D. Zhao, B. Borders, and D. Greene. 2012. Cultural intensity and planting density effects on aboveground biomass of 12-year-old loblolly pine trees in the Upper Coastal Plain and Piedmont of the southeastern United States. *Forest Ecology and Management* 267: 157-162.
- Aman, A.L., S.A. Baker, and W.D. Greene. 2011. Productivity and product quality measures for chippers and grinders on operational southern US timber harvests. *International Journal of Forest Engineering* 22(2): 7-14.
- Reddish, R.P., S.A. Baker, and W.D. Greene. 2011. Improving log trucking efficiency using in-woods scales. *Southern Journal of Applied Forestry* 35(4): 178-183.
- Das, K.C., K. Singh, B. Bibens, R. Hilten, S. Baker, W.D. Greene, and J.D. Peterson. 2011. Pyrolysis characteristics of forest residues obtained from different harvesting methods. *Applied Engineering in Agriculture* 27(1): 107-113.
- Hamsley, A.K, W.D. Greene, S.A. Baker, and G.E. Murphy. 2010. Individual stem value recovery of modified and conventional tree-length systems in the southeastern United States. *International Journal of Forest Engineering* 21(1): 7-11.

- Baker, S.A., M.D. Westbrook, Jr., and W.D. Greene. 2010. Evaluation of integrated harvesting systems in pine stands of the southern United States. *Biomass & Bioenergy* 34: 720-727.
- Cass, R.D., S.A. Baker, and W.D. Greene. 2009. Costs and productivity impacts of product sorting on conventional ground-based timber harvesting operations. *Forest Products Journal* 59(11/12): 108-114.
- Hamsley, A.K, W.D. Greene, and S.A. Baker. 2009. Comparison of value harvested by modified and conventional tree-length systems in the southeastern United States. *Forest Products Journal* 59(4): 29-34.
- Baker, S.A. and W.D. Greene. 2008. Changes in Georgia's Logging Workforce, 1987-2007. *Southern Journal of Applied Forestry* 32(2): 60-68.
- Westbrook, M.D., Jr., W.D. Greene, and R.L. Izlar. 2007. Utilizing forest biomass by adding a small chipper to a tree-length southern pine harvesting operation. *Southern Journal of Applied Forestry* 31(4): 165-169.
- Greene, W.D. S.A. Baker, and T. Lowrimore. 2007. Analysis of Log Hauling Vehicle Accidents in the State of Georgia, USA, 1988-2004. *International Journal of Forest Engineering* 18(2): 52-57.
- Hamsley, A.K., W.D. Greene, J.P. Siry, and B.C. Mendell. 2007. Improving timber trucking performance by reducing variability of log truck weights. *Southern Journal of Applied Forestry* 31(1): 12-16.
- Egan, A.F., W.D. Greene, N. deHoop, J.H. Mayo. 2006. Unused logging production capacity in northern New England, USA. *International Journal of Forest Engineering* 17(1): 31-38.
- Siry, J.P., W.D. Greene, T.G. Harris, Jr., R.L. Izlar, A.K. Hamsley, K. Eason, T. Tye, S.S. Baldwin, and C. Hyldahl. 2006. Wood supply chain efficiency and fiber cost – What can we do better? *Forest Products Journal* 56(10): 4-10.
- Conradie, I.P., W.D. Greene, J.F. Cox, G.E. Murphy. 2005. Applying the Thinking Process of the Theory of Constraints: An exploratory research methodology to evaluate the lack of use of cut-to-length harvesting systems in the southeastern USA. *Journal of Forest Products Business Research* 2(1).
- Greene, W.D., J.H. Mayo, C.F. deHoop, and A.F. Egan. 2004. Causes and costs of unused logging capacity in the southern USA and Maine. *Forest Products Journal* 54(5): 29-37.
- Conradie, I.P., W.D. Greene, and M.L. Clutter. 2004. The impact of a mill policy to discourage overweight log trucks. *Southern Journal of Applied Forestry* 28(2): 132-136.
- Ulmer, J.R., W.D. Greene, M.L. Clutter, and J.H. Mayo. 2004. Consistency ratings for assessing the impact of variations in mill demand on logging crew production and cost. *Forest Products Journal* 54(7/8): 57-63.
- Conradie, I.P., W.D. Greene, and G.E. Murphy. 2004. Value recovery with harvesters in southeastern USA pine stands. *Forest Products Journal* 54(12): 80-84.

- de Hoop, C.F., A.F. Egan, W.D. Greene and J.H. Mayo. 2004. Are "Preferred Supplier" Contractors Representative of the Logging Business Community? A Survey Analysis. Business Research Yearbook. International Academy of Business Disciplines. Radford, VA. 5 pp. ISBN 1-889754-08-0.
- Halleux, O.R.M. and W.D. Greene. 2003. Setting Analyst: An operational harvest planning tool. International Journal of Forest Engineering 14(1): 49-61.
- Greene, W.D., B.D. Jackson, and J.D. Culpepper. 2001. Georgia's logging businesses, 1987-1997. Forest Products Journal 51(1): 25-28.
- Mooney, S.T., K.D. Boston, and W.D. Greene. 2000. Production and costs of the Chambers Delimbinator in first thinning of pine plantations. Forest Products Journal 50(4): 81-84.
- Greene, W.D., B.D. Jackson, and D.C. Woodruff. 1998. Characteristics of logging contractors and their employees in Georgia. Forest Products Journal 48(1): 47-53.
- Wang, J. and W.D. Greene. 1998. Stand, harvest, and equipment interactions caused by harvesting prescriptions. Forest Products Journal 48(9): 81-86.
- Greene, W.D., T.G. Harris, Jr., C.E. DeForest, and J. Wang. 1997. Harvesting cost implications of changes in the size of timber sales in Georgia. Southern Journal of Applied Forestry 21(4): 193-198.
- Greene, W.D., B.D. Jackson, L. Shackleford, R.L. Izlar, and W. Dover. 1996. Safety of log transportation after regulation and training in the State of Georgia, USA. Journal of Forest Engineering 7(3): 25-31.
- Greene, W.D. and J.S. Carruth. 1994. Log separation economics on in-woods chipping operations. Forest Products Journal 44(10): 68-72.
- Jackson, B.D., W.D. Greene, and M.L. Baxter. 1993. Local regulation of timber harvesting and trucking in Georgia. Southern Journal of Applied Forestry 17(4): 200-206.
- Carruth, J.S. and W.D. Greene. 1993. Potential for in-woods chipping on Southern Woodlands plantations 1993-2002. Restricted Research Report No. 146, Forest Science Laboratory, Westvaco Corporation, Summerville, SC.
- Greene, W.D. and J.S. Carruth. 1993. Effect of log separation on in-woods chipping operations. Restricted Research Report No. 141, Forest Science Laboratory, Westvaco Corporation, Summerville, SC.
- Lewis, K.L. and W.D. Greene. 1993. Harvest felling of residual stems to reduce site preparation costs. Southern Journal of Applied Forestry 17(1): 39-43.
- Player, A.L. and W.D. Greene. 1992. Potential for mechanized harvesting systems in the Republic of South Africa. South African Forestry Journal 162: 9-19.

- Miller, C.F. and W.D. Greene. 1992. Delimiting southern pines: gate versus the CTR Model 314 De-Limber. *Forest Products Journal* 42(6): 11-16.
- Greene, W.D. and J.F. McNeel. 1991. Productivity and cost of sawhead feller-bunchers in the South. *Forest Products Journal*. 41(3): 21-26.
- Borders, B.E., W.D. Greene, and M.L. Clutter. 1991. Variable bedding, planting, harvesting and transportation costs impact optimal economic management regimes. *Southern Journal of Applied Forestry* 15(1): 34-39.
- Greene, W.D. 1991. Cost estimates for saw felling heads in the South. *Forest Products Journal* 41(2): 21-26.
- Jackson, B.D., W.D. Greene, and A.L. Schilling. 1990. Productivity of a tree-length forwarder for logging on wet sites. *Journal of Forest Engineering* 1(2): 9-13.
- Cubbage, F.W. and W.D. Greene. 1989. Conventional and biomass harvesting costs by forest tract size. *Biomass* 20(1989): 219-228.
- Faust, T.D. and W.D. Greene. 1989. Effects of felling head type on tensile strength of southern pine dimension lumber. *Forest Products Journal* 39(11/12): 82-84.
- Cubbage, F.W., W.D. Greene, and J.P. Lyon. 1989. Tree size and species, volume, and tract size: effects on southern harvesting costs. *Southern Journal of Applied Forestry* 13(3): 145-152.
- Greene, W.D. and J.F. McNeel. 1989. Potential costs of shear damage in a southern pine chip-n-saw mill. *Forest Products Journal* 39(5): 12-18.
- Greene, W.D. and B.J. Stokes. 1988. Performance of small grapple skidders in plantation thinning applications. *Southern Journal of Applied Forestry* 12(4): 243-246.
- Greene, W.D., F.W. Cubbage, and J.F. McNeel. 1988. Characteristics of independent loggers in Georgia. *Forest Products Journal* 38(7/8): 51-56.
- Reisinger, T.W., W.D. Greene, and J.F. McNeel. 1987. Microcomputer-based software for harvesting system analysis. *Southern Journal of Applied Forestry* 12(1): 37-41.
- Greene, W.D. and J.F. McNeel. 1987. Productivity, costs, and levels of butt damage with a Bell Model T feller-buncher. *Forest Products Journal* 37(11/12): 70-74.
- Greene, W.D., J.L. Fridley, and B.L. Lanford. 1987. Variability between operators in interactive simulations of feller-buncher operations. *Transactions of the American Society of Agricultural Engineers* 30(4): 918-921, 931.
- Greene, W.D., B.L. Lanford, and E.F. Mykytka. 1987. Stand and operating effects on feller-buncher productivity in second thinnings. *Forest Products Journal* 37(3): 27-34.

Greene, W.D., B.L. Lanford, and J.N. Hool. 1987. Potential product volumes from second thinnings of southern pine plantations. *Forest Products Journal* 37(5): 8-12.

Greene, W.D., B.L. Lanford, and R.A. Tufts. 1987. Evaluation of harvesting systems for the second thinning of pine plantations. *Forest Products Journal* 37(6): 9-14.

Reisinger, T.W., W.D. Greene, J.F. McNeel, and T.M. Cooney. 1986. Microcomputer programs to analyze timber harvesting. *Journal of Forestry* 84(10): 17-20.

Greene, W.D. and W.B. Stuart. 1985. Skidder and tire size effects on soil compaction. *Southern Journal of Applied Forestry* 9(3): 154-157.

Greene, W.D. and B.L. Lanford. 1985. A grapple processor for plantation thinning. *Forest Products Journal* 35(3): 60-64.

### **Funding from External Sources**

Wood Supply Research Institute. \$33,500. Validating the Southern logging cost index. Dale Greene, Shawn Baker and Richard Mei. February 2014.

Georgia Biomass LLC. \$10,000. Tracking fuel consumption of timber harvesting equipment. June 2013. Dale Greene and Shawn Baker.

Plum Creek Timber Company. \$15,000. Factors affecting logging costs and contract rates. Dale Greene and Shawn Baker. May 2012.

Georgia Biomass LLC. \$17,530. Fuel consumption of timber harvesting equipment. Dale Greene and Shawn Baker. April 2012.

Wood Supply Research Institute. \$50,000. Regional cost analysis and indices for conventional timber harvesting operations. Dale Greene, Shawn Baker, Tom Harris, Richard Mei. April 2012.

Plum Creek Timber Company. \$40,000. Factors affecting logging costs and contract rates. Dale Greene and Shawn Baker. February 2011.

Rayonier, Inc. \$21,100. Chip properties associated with biomass harvests in Georgia coastal plain pine plantations. Dale Greene and Shawn Baker. September 2010.

US Department of Energy, Southeastern SunGrant Program. \$210,446. Improving Woody Biomass Feedstock Logistics by Reducing Ash and Moisture Content. Dale Greene, Shawn Baker, Jason Cutshall, and Dana Mitchell. January 2010.

Wood Supply Research Institute. \$50,000. Integrating Large-Scale Biomass Harvesting into the US Wood Supply System. Dale Greene, Jacek Siry, Shawn Baker, Jason Cutshall, Andres Enrich, Tom Harris, Bob Izlar. January 2010.

Georgia Traditional Industries Program. \$76,900. Evaluation of alternative biomass harvesting methods. Dale Greene and Shawn Baker. July 2009.



Plum Creek Timber Company. \$10,647. Evaluation of alternative biomass harvesting methods. Dale Greene. December 2008.

Georgia Traditional Industries Program. \$72,500. Evaluation of alternative biomass harvesting methods. Dale Greene and Shawn Baker. July 2008.

Georgia Traditional Industries Program. \$39,825. Cost and productivity impacts of product sorting on conventional ground-based timber harvesting operations. Dale Greene and Shawn Baker. July 2008.

Wood Supply Research Institute. \$45,000. Harvesting cost implications of shifts in forest industry characteristics. Dale Greene. June 2008.

Georgia Traditional Industries Program. \$48,500. Harvesting and Merchandising Strategies for Recovery of Forest Biomass from Loblolly and Slash Pine Plantations. Dale Greene, Shawn Baker, and Bob Izlar. July 2007.

Georgia Traditional Industries Program. \$33,500. Using Systems That Measure Log Dimensions to Increase Value Recovery During Harvests of Pine Plantations. Dale Greene, Amanda Hamsley, and Shawn Baker. July 2007.

Wood Supply Research Institute. \$10,000. Cost of Log Sorts. Dale Greene. July 2007.

Plum Creek Timber Company. \$12,600. Using Systems That Measure Log Dimensions to Increase Value Recovery during Harvests of Pine Plantations. Dale Greene. July 2007.

Georgia Traditional Industries Program. \$67,750. Recovery of Small Stems and Forest Residues for Bio-Based Products and Energy. Dale Greene, Joy Peterson, and Bob Izlar. July 2006.

Georgia Traditional Industries Program. \$47,500. Harvesting Systems for the Recovery of Small Stems and Forest Residues. Dale Greene and Bob Izlar. July 2005.

Wood Supply Research Institute. \$50,000. Status and future sustainability of the U.S. wood supply system. Dale Greene, Jacek Siry, Tom Harris, Bob Izlar, Carol Hyldahl. August 2004.

USDA Forest Service, Southern Research Station. \$50,000. Reducing forest fuels through better product sorting. Dale Greene and Laurie Schimleck. August 2003.

Wood Supply Research Institute. \$140,524. Causes and costs of unused wood production capacity. W.D. Greene, J.H. Mayo, and K.D. Boston. December 1999.

USDA Forest Service, Southern Research Station. \$20,500. Value recovery for cut-to-length harvesting systems in the southeastern USA. K.D. Boston and W.D. Greene. August 1999.

USDA Forest Service, Southern Research Station. \$32,000. Computer-aided planning of ground-based timber harvesting operations. August 1999.

USDA Forest Service, Southern Research Station. \$15,000. Interactive simulation enhancements for modeling operational forestry problems. September 1997.

USDA Forest Service, Southern Research Station. \$15,000. Mechanical processing of southern species: performance, utilization, and aesthetics. July 1997.

USDA Forest Service, Southern Research Station. \$15,000. Modeling stand, harvest, and equipment interactions caused by forest harvesting prescriptions. September 1995.

Union Camp Corporation. \$5,000. Demographic factors associated with Georgia's logging labor force. November 1995.

Southern Forest Assessment Consortium. \$12,000. Effects of sale volumes and logging systems on wood production economics. July 1994.

USDA Forest Service. \$10,000. Improving productivity, quality, and operation of delimiting and bucking in the southern USA. April 1991. (renewal)

Tennessee Valley Authority. \$6,446. Field handbook of local timber harvesting regulations in Georgia. January 1991.

Logging Safety Foundation. \$2,500. Using motor vehicle accident data to improve log truck driver training. January 1991.

USDA Forest Service. \$6,300. Improving productivity, quality, and operation of delimiting and bucking in the southern USA. August 1990.

Georgia Forestry Commission. \$6,430. Reducing site preparation costs with intensive harvest felling. July 1990. (renewal)

Georgia Forestry Commission. \$7,890. Reducing site preparation costs with intensive harvest felling. July 1989.

Procter and Gamble Cellulose Corp. \$8,500. Felling unmerchantable stems during harvesting to reduce site preparation costs. March 1989.

USDA Forest Service. Southern Forest Experiment Station. \$10,000. Saw-type felling heads for southern timber harvesting. April 1988.

USDA Forest Service. Southern Forest Experiment Station. \$4,000. Productivity of mechanical site preparation operations in the South. June 1988.

Georgia Forestry Commission. \$15,817. Productivity of mechanical site preparation operations. June 1988. (renewal)

Buckeye Cellulose Company. \$5,060. Economic analysis of shear versus saw felling heads. January 1988.

Georgia Forestry Commission. \$15,231. Productivity of mechanical site preparation operations. June 1988.

International Paper Company. \$1,200. Use of a high-flotation forwarder for wetland logging. April 1987.

Georgia Forestry Commission. \$12,373. Subsoiling for the establishment of loblolly pine in the Georgia Piedmont. October 1986.

Southeastern Regional Biomass Energy Program, TVA/DOE. \$26,624. Equipment and systems for economical harvesting of small forest tracts. October 1986.

USDA Forest Service. Southern Forest Experiment Station. \$6,000. Thinning plantations with small skidding systems. August 1986.