

## **CURRICULUM VITAE**

Wendell P. Cropper, Jr.

School of Forest Resources and Conservation  
University of Florida  
214 Newins-Ziegler Hall  
PO Box 110410  
Gainesville, FL 32611-0410  
352-846-0859; wcropper@ufl.edu

### **PERSONAL**

Birth date: 22 June, 1951  
Birth place: Gary, Indiana

### **EDUCATION**

1969-1973 Cornell College, Mount Vernon, Iowa. B.A. in Biology

1973-1980 Emory University, Atlanta, Georgia. M.S. and Ph.D. in Biology

### **EXPERIENCE**

2014- Professor, Biological Process Modeling. School of Forest Resources and Conservation, University of Florida.

2008-2014 Associate Professor, Biological Process Modeling. School of Forest Resources and Conservation, University of Florida.

2002-2008 Assistant Professor, Biological Process Modeling. School of Forest Resources and Conservation, University of Florida.

1995-2002 Associate Scientist. Rosenstiel School of Atmospheric and Marine Science, University of Miami.

1993-1995 Associate Scientist. School of Forest Resources and Conservation, University of Florida.

1985-1993 Visiting Assistant Professor and Assistant Scientist, School of Forest Resources and Conservation, University of Florida.

1984-1985 Research Associate. Center for Environmental Research, Cornell University.

1981-1984 Post-Doctoral Research Associate. School of Forest Resources and Conservation, University of Florida.

1981 Assistant Professor of Biology, Emory University.

## **PROFESSIONAL AND HONORARY SOCIETIES**

American Institute of Biological Sciences

Beta Beta Beta Biological Honorary Society

Ecological Society of America

Society of American Foresters

International Society for Ecological Modelling

Sigma Xi

Association of Southeastern Biologists

Association for Tropical Biology and Conservation

## **ADDITIONAL PROFESSIONAL ACTIVITIES**

Director of the Institute of Food and Agricultural Sciences Statistical Consulting 2014-

Member of the NSF Doctoral Dissertation Improvement Grant Panel.  
Feb. 2006. Primary reviewer of 15 proposals.

Participated in the Technical Assistance Visit for the USDA Forest Service Southern Research Station; Biological Foundations of Southern Productivity and Sustainability Research Work Unit. Feb., 2006.

Member of the Advisory Board for the National Institute for Global Environmental Change Southeast Regional Center.

Member of scientific research proposal review panels:  
USDA NRI Ecosystems, NIGEC/DOE (3 times), EPA EMAP.

Ad hoc proposal reviews for NSF, USDA Forest Service,  
Natural Environment Research Council (UK), EPA, USDA NRI,  
American Philosophical Society.

Manuscript reviews for Canadian Journal of Forest Research, EPA, DOE, USDA Forest Service, Forest Science, Soil Sci. Soc. Amer. J., Journal of Environmental Quality, Wetlands Ecology and Management, Forest Ecology and Management, Biomass and Bioenergy, Ecology, Natural resource Modeling, Ecological Modeling, Journal of Theoretical Biology, Florida Scientist, Proceedings of the Louisiana Academy of Sciences, Journal of Forest Research, Estuaries, Urban Ecosystems, Agricultural and Forest Meteorology, Ecological Letters, Journal of Geophysical Research.

Served on organizing committees for scientific meetings:

Environmental constraints on the structure and productivity of pine forest ecosystems: a comparative analysis, Gainesville, Fl. (NSF); Accurate predictions of southern pines via process models, Asheville, NC (USDA F.S.)

## **COURSES TAUGHT**

Environmental Science (non-major undergraduate class), Emory University.

Forests for the Future (non-major undergraduate), University of Florida

Forest Ecology (undergraduate), University of Florida.

Simulation Analysis of Forest Ecosystems (graduate), University of Florida.

Research Planning (graduate), University of Florida.

Advanced Forest Ecology (graduate), University of Florida.

Fire Modeling (graduate), University of Florida.

Advanced Fire Ecology (graduate), University of Florida.

Analysis of Forest Ecosystems (graduate; online). University of Florida

Honors Colloquium (undergraduate), University of Florida.

Simulation modeling section of undergraduate Quantitative Methods course, University of Florida.

## **GRADUATE STUDENTS (MAJOR ADVISOR)**

Douglas Shoemaker (M.S. 2005, SFRC, UF)

Louise Loudermilk (M.S. 2006, SFRC, UF)

Jennifer Holm (M.S., 2007, SNRE, UF)

Louise Loudermilk (Ph.D., 2010, SNRE, UF)

Helen Claudio (M.S., 2013, SNRE, UF)

Sebastian Palmas (M.S., 2013, SFRC, UF)

Brenda Thomas(M.F.R.C., 2013, SFRC)

Martin Jacob (M.S., 2015, SFRC, UF)

Davut Atar (M.S., SFRC, 2016, UF)

Todd Bertwell (M.S., SFRC, 2016, UF)

Mohamad Rois Ridlo (M.S., SFRC, UF)

Yudaputra Angga (M.S., SFRC, UF)

## **INVITED LECTURES**

The longleaf paradigm. 99th Ecological Society of America Annual Meeting August 2014)

Longleaf pine and global change: How should models be used? The 38<sup>th</sup> Natural Areas Conference. Tallahassee FL, Nov. 2011

Carbon sequestration in longleaf pine ecosystems: current status of knowledge and information needs. The Center for Longleaf Pine Ecosystems at Auburn University and the Fish and Wildlife Service Joint Ventures Program. Auburn, Alabama, Feb. 2010.

The Energy Working Group of the Florida Century Commission's Cooperative Conservation Blueprint Initiative, "Carbon sequestration in forests". July 2008, Orlando, FL

Wedgworth Leadership Institute for Agriculture and Natural Resources, "Global Climate Change". Gainesville, FL July 2008

The Southern Forest Research Partnership Carbon Workshop, " The roles of simulation modeling in forest carbon research and management ". May 2006, Asheville NC

U.S. Army Corps of Engineers workshop on Modeling Sediment Re-suspension, Water Quality, and Aquatic Vegetation, New Orleans, June, 1997.

Mangrove system modeling workshop, Florida Bay Program Management Committee, West Palm Beach, Florida, May 1996.

Integrated Modeling Program meeting, Southern Global Change Program, Oak Ridge, Tenn., Sept. 1995.

Ecosystems of Florida Symposium, Gainesville, May, 1995.

Joseph W. Jones Ecological Research Center, Ichauway, Georgia, Oct., 1993.

Royal Forestry Commission, Farnham, England, Aug. 1992.

International Congress of Ecology, Yokohama, Japan, Aug., 1990.

SFRC-SAF spring symposium, Gainesville, April, 1990.

Cornell National Supercomputer Facility Workshop on global model development, Ithaca, NY, Jan., 1989.

Our Changing Global Environment, New York, NY, Feb., 1989.

PAN-EARTH workshop, Beijing, China, Aug., 1988.

SCOPE scientific symposium on stress ecology, Bangkok, Thailand, Feb., 1987.

Joint SCOPE-UN conference on the environmental consequences of nuclear war. Geneva, Switzerland, Nov., 1987.

## **RESEARCH INTERESTS**

Mathematical modeling and simulation of ecosystem processes. Forest ecology, ecology of coastal communities, population biology. Productivity, below-ground dynamics, and nutrient dynamics of ecosystems.

## **GRANTS (P.I. OR CO-P.I.)**

Coupling carbon, water, and nutrient cycles for a forested ecosystem. NSF, 3/1/86 to 2/8/89, \$899,753.

Modeling carbon dynamics of slash pine plantations in response to climate change. EPA, 1/90 to 9/30/92, \$28,000/yr.

Estimating the effects of global climate change on the carbon flux of loblolly pine forests (sub-contract from to Univ. of Georgia to W. Cropper). USDA, 3/1/92 to 1995, \$30,000/yr.

Assessing climate change effects: Sensitivity analyses of ecological and agricultural models. EPA, 10/1/91 to 9/30/93, \$22,000/yr.

Exchanges of energy and radiatively active gases between slash pine and cypress ecosystems and the atmosphere in the southeastern U.S. DOE, 7/1/94 to present, \$97,000/yr.

Integrated Modeling System for the Southern Global Change Program: SPM modeling, 9/95 to 9/98, \$16,111/yr.

Dynamic simulation model of resource availability and plant response for longleaf pine wiregrass communities across complex environmental gradients. Joseph W. Jones Ecological Research Center, 10/96-10/97, \$21,293

Human-Environment linkages in the south Florida coastal ecosystem: Effects of natural and anthropogenic stressors. NOAA Coastal Ocean Program, 4/97-5/97, \$1.4 million.

Collaborative research: controls on the isotopic composition of fixed CO<sub>2</sub> NSF, 2004-2007, \$138,612

Dynamics of carbon, water and energy fluxes for pine ecosystems in Florida: Recovery from perturbation and variation across the landscape. DOE/NIGEC, 2004-2006, \$398,654

Reducing carbon uncertainties in pine forests in the southeastern U.S. Coastal Plain. DOE/NICCR, 2006-2009, \$374, 999

Carbon sequestration scoping project analysis. Florida Forestry Association, 2007, \$6,000

Virtual learning forests: developing collaborative opportunities in virtual world environments for undergraduate natural resource students. USDA, 2009-2011, \$138,099

Developing decision support tools for ecological forestry and carbon management. DOD/SERDP, 2010-2015, \$808,180

Integrating research, education and extension for enhancing Southern pine climate change mitigation and adaptation. USDA/NIFA, 2011-2016, \$4,000,000

## PUBLICATIONS

Researcher ID: E-5952-2010 (<http://www.researcherid.com>)  
ORCID <http://orcid.org/0000-0001-7851-7382>

Harwell, M.A., W.P. Cropper, Jr., and H.L. Ragsdale. 1977. Nutrient recycling and stability: A reevaluation. *Ecology* 58:660-666.  
doi: 10.2307/1939016

Sophianopoulos, J.A., S.J. Durham, A.J. Sophianopoulos, H.L. Ragsdale, and W.P. Cropper, Jr. 1978. Ultrafiltration is theoretically equivalent to equilibrium dialysis but much simpler to carry out. *Arch. Biochem. Biophys.* 187:132-137.  
doi:10.1016/0003-9861(78)90015-2

Harwell, M.A., W.P. Cropper, Jr., and H.L. Ragsdale. 1981. Analyses of transient characteristics of a nutrient cycling model. *Ecological Modelling* 12:105-131.  
doi:10.1016/0304-3800(81)90027-2

Cropper, W.P., Jr., and K.C. Ewel. 1983. Computer simulation of long-term carbon storage patterns in Florida slash pine plantations. *Forest Ecology and Management* 6:101-114.  
doi:10.1016/0378-1127(83)90015-4

Cropper, W.P., Jr., and K.C. Ewel. 1984. Carbon storage patterns in douglas-fir ecosystems. *Canadian Journal of Forest Research* 14:855-859.  
doi:10.1139/x84-152

Gholz, H.L., K.C. Ewel, W.P. Cropper, Jr., and L.C. Hendry. 1984. Productivity above- and below-ground in plantations of slash pine (*Pinus elliottii*) in northern Florida, U.S.A.- A preliminary synthesis. IUFRO symposium on site and productivity of fast growing plantations. pp. 729-740.

Cropper, Jr., W.P., K.C. Ewel, and J. Raich. 1985. The measurement of soil CO<sub>2</sub> evolution *in situ*. *Pedobiologia* 28:35-40.

Gholz, H.L., C.S. Perry, W.P. Cropper, Jr., and L.C. Hendry. 1985. Litterfall, decomposition and N and P immobilization in a chronosequence of slash pine (*Pinus elliottii*) plantations. *Forest Science* 31:463-478. <http://www.ingentaconnect.com/content/saf/fs/1985/00000031/00000002/art00027>

Cropper, Jr., W.P. and M.A. Harwell. 1985. Food availability after nuclear war. pp. 359-426 In: M.A. Harwell and T.C. Hutchinson (Eds.). The environmental consequences of nuclear war. Vol. II. Ecological, agricultural and human effects. John Wiley and Sons, Chichester, England. 523 pp.

Harwell, M.A. and W.P. Cropper, Jr. 1985. Potential effects of nuclear war on agricultural productivity. pp. 271-358 In: M.A. Harwell and T.C. Hutchinson (Eds.). The environmental consequences of nuclear war. Vol. II. Ecological, agricultural and human effects. John Wiley and Sons, Chichester, England. 523 pp.

Harwell, M.A., T.C. Hutchinson, W.P. Cropper, Jr. and C.C. Harwell. 1985. Vulnerability of ecological systems to climatic effects of nuclear war. pp. 81-172 In: M.A. Harwell and T.C. Hutchinson (Eds.). The environmental consequences of nuclear war. Vol. II. Ecological, agricultural and human effects. John Wiley and Sons, Chichester, England. 523 pp.

Hutchinson, T.C., W.P. Cropper, Jr., and H.D. Grover. 1985. Ecological principles relevant to nuclear war. pp. 3-80 In: M.A. Harwell and T.C. Hutchinson (Eds.). The environmental consequences of nuclear war. Vol. II. Ecological, agricultural and human effects. John Wiley and Sons, Chichester, England. 523 pp.

- Hutchinson, T.C., M.A. Harwell, W.P. Cropper, Jr., and H.D. Grover. 1985. Additional potential effects of nuclear war on ecological systems. pp. 173-270 In: M.A. Harwell and T.C. Hutchinson (Eds.). The environmental consequences of nuclear war. Vol. II. Ecological, agricultural and human effects. John Wiley and Sons, Chichester, England. 523 pp.
- Gholz, H.L., L.C. Hendry, and W.P. Cropper, Jr. 1986. Organic matter dynamics of fine roots in plantations of slash pine (*Pinus elliottii*) in north Florida. *Canadian Journal of Forest Research* 16:529-538.  
doi:10.1139/x86-093
- Cropper, Jr., W.P. and K.C. Ewel. 1987. A regional carbon storage simulation for large-scale biomass plantations. *Ecological Modelling* 36:171-180.  
doi:10.1016/0304-3800(87)90066-4
- Ewel, K.C., W.P. Cropper, Jr., and H.L. Gholz. 1987. Soil CO<sub>2</sub> evolution in Florida slash pine plantations. I. Changes through time. *Canadian Journal of Forest Research* 17:325-329.  
doi:10.1139/x87-054
- Ewel, K.C., W.P. Cropper, Jr., and H.L. Gholz. 1987. Soil CO<sub>2</sub> evolution in Florida slash pine plantations. II. Importance of root respiration. *Canadian Journal of Forest Research* 17:330-333.  
doi:10.1139/x87-055
- Ackerman, T.P. and W.P. Cropper, Jr. 1988. On scaling global climate projections to local biological assessments. *Environment* 30(5):31-34.
- Cropper, Jr., W.P. 1988. Labile carbon dynamics in a Florida slash pine plantation. pp. 278-284. In: A.R. Ek, S.R. Shifley, and T.E. Burk (Eds.) Forest growth modelling and prediction. Proceedings of the IUFRO conference, August 1987, Minneapolis Minnesota. USDA Forest Service North Central Forest Experiment Station General Technical Report NC-120.
- Cropper, Jr., W.P. and H.L. Gholz. 1990. Modelling the labile carbon dynamics of a Florida slash pine plantation. *Silva Carelica* 15:121-130.
- Gholz, H.L., S.A. Vogel, W.P. Cropper, Jr., K. McKelvey, K.C. Ewel, R.O. Teskey and P.J. Curran. 1991. Dynamics of canopy structure and light interception in *Pinus elliottii* stands of north Florida. *Ecological Monographs* 61:33-51.  
doi: 10.2307/1939016; <http://www.jstor.org/stable/1942998>
- Cropper, Jr., W.P. and H.L. Gholz. 1991. *In situ* needle and fine root respiration in mature slash pine trees. *Canadian Journal of Forest Research* 21:1589-1595.  
doi:10.1139/x91-221
- Gholz, H.L. and W.P. Cropper, Jr. 1991. Carbohydrate dynamics in mature *Pinus elliottii* var *elliottii* trees. *Canadian Journal of Forest Research* 21:1742-1747.  
doi:10.1139/x91-240
- Harris, L.D. and W.P. Cropper, Jr. 1992. Between the devil and the deep blue sea: Implications of climate change for wildlife in Florida. pp. 309-324 In: R. L. Peters and T.E. Lovejoy (eds.) Global warming and biological diversity. Yale Univ. Press, New Haven. 386 pp.
- Cropper, Jr., W.P. and H.L. Gholz. 1993. Simulation of the carbon dynamics of a Florida slash pine plantation. *Ecological Modelling* 66:231-249.  
doi:10.1016/0304-3800(93)90115-9

- Cropper, Jr., W.P. and H.L. Gholz. 1993. Constructing a seasonal carbon balance for a forest ecosystem. *Climate Research* 3:7-12.  
<http://www.int-res.com/abstracts/cr/v03/n1-2/>
- Teskey, R.O., H.L. Gholz and W.P. Cropper, Jr. 1994. Influence of climate and nutrient availability on net photosynthesis of mature slash pine. *Tree Physiology* 14:1215-1227.  
doi:10.1093/treephys/14.11.1215
- Cropper, Jr., W.P. and H.L. Gholz. 1994. Evaluating potential response mechanisms of a forest stand to fertilization and night temperature: A case study using *Pinus elliottii*. *Ecological Bulletins*, (Copenhagen) 43:154-160.  
<http://www.jstor.org/stable/20113138>
- Ryan, M.G., S.T. Gower, R.M. Hubbard, R.H. Waring, H.L. Gholz, W.P. Cropper, Jr., and S.W. Running. 1995. Stem maintenance respiration of conifer stands in contrasting climate. *Oecologia* 101:133-140.  
<http://www.jstor.org/stable/4220865>
- Luckyanov, N.K., W.P. Cropper, Jr., and M.A. Harwell. 1995. State analyses of ecological models: Model reaction to parameter change. *Ecological Modelling* 82:99-104.  
doi:10.1016/0304-3800(94)00077-U
- Cropper, Jr., W.P. 1996. Ecosystem responses to elevated CO<sub>2</sub>. (Book review). *Ecology* 77:1956.  
<http://www.jstor.org/stable/2265803>
- Weinstein, D.A., W.P. Cropper, Jr., and S.G. McNulty. 1998. Summary of modeling predictions of the effects of climate change on forest stand productivity in the southeastern U.S. pp. 479-500 In: S. Fox and R.A. Mickler (eds.). *The productivity and sustainability of southern forest ecosystems in a changing environment*. Springer-Verlag, New York.
- Cropper, Jr. W.P. 1998. Modeling the potential sensitivity of slash pine stem growth to increasing temperature and carbon dioxide. pp. 353-366 In: S. Fox and R.A. Mickler (eds.). *The productivity and sustainability of southern forest ecosystems in a changing environment*. Springer-Verlag, New York.
- Cropper, Jr. W.P., K. Peterson, and R.O. Teskey. 1998. MAESTRO simulations of the response of loblolly pine to elevated temperatures and carbon dioxide. pp. 327-339 In: S. Fox and R.A. Mickler (eds.). *The productivity and sustainability of southern forest ecosystems in a changing environment*. Springer-Verlag, New York.
- Cropper, Jr. W.P. and D. DiResta. 1999. Simulation of a Biscayne Bay, Florida commercial sponge population: Effects of harvesting following Hurricane Andrew. *Ecological Modelling* 118:1-15.  
doi:10.1016/S0304-3800(99)00039-3
- Gholz, H.L., D.N. Guerin, and W.P. Cropper, Jr. 1999. Phenology and productivity of saw palmetto (*Serenoa repens*) in a north Florida slash pine plantation. *Canadian Journal of Forest Research* 29:1248-1253.  
doi:10.1139/cjfr-29-8-1248
- Luxmoore, R.J., W.W. Hargrove, M.L. Tharp, W. M. Post, M.W. Berry, K.S. Minser, W.P. Cropper, Jr., D.W. Johnson, B. Zeide, R. L. Amateis, H.E. Burkhart, V. Clark Baldwin, Jr., K.D. Peterson, S. Fox, S.G. McNulty, and R.A. Mickler. 2000. Signal-transfer modeling for regional assessment of forest responses to environmental and land-use changes in the southern United States. *Environmental Modeling and Assessment* 5:125-137.  
doi:10.1023/A:1019005510316

- McGrath, D.A., M.L. Duryea, N.B. Comerford, W.P. Cropper. 2000. Nitrogen and Phosphorus cycling in an Amazonian agroforest eight years following forest conversion. *Ecological Applications* 10:1633-1647. doi: 10.1890/1051-0761(2000)010[1633:NAPCIA]2.0.CO;2 <http://www.jstor.org/stable/2641228>
- Cropper, W.P., Jr. 2000. SPM2: A simulation model for slash pine (*Pinus elliottii*) forests. *Forest Ecology and Management* 126:201-212. doi:10.1016/S0378-1127(99)00086-9
- Pinard, M.A. and W.P. Cropper, Jr. 2000. A simulation model of carbon dynamics following logging of dipterocarp forest. *Journal of Applied Ecology* 37:267-283. doi: 10.1046/j.1365-2664.2000.00488.x
- Clark, K.L., W. P. Cropper, Jr., and H.L. Gholz. 2001. Evaluation of modeled carbon fluxes for a slash pine ecosystem: SPM2 simulations compared to eddy flux measurements. *Forest Science* 47:52-59. <http://www.ingentaconnect.com/content/saf/fs/2001/00000047/00000001/art00006>
- Gentile, JH, MA Harwell, WP Cropper, Jr., CC Harwell, D DeAngelis, S Davis, JC Ogden, and D Lirman. 2001. Ecological conceptual models: a framework and case study on ecosystem management for South Florida. *The Science of the Total Environment* 274: 231-253. doi:10.1016/S0048-9697(01)00746-X
- McGrath, D.A., M.L. Duryea, W.P. Cropper. 2001. Soil phosphorus availability and fine root proliferation in Amazonian agroforests six years following forest conversion. *Agriculture, Ecosystems & Environment*. 83:271-284. doi:10.1016/S0167-8809(00)00176-6
- Cropper, W. P. , Jr., D. Lirman, S. C. Tosini, D. DiResta, J. Luo, and J. Wang. 2001. Population dynamics of a commercial sponge in Biscayne Bay, Florida. *Estuarine, Coastal, and Shelf Science* 53:13-23. doi:10.1006/ecss.2001.0787
- Luxmoore, R.J., W.W. Hargrove, M.L. Tharp, W. M. Post, M.W. Berry, K.S. Minser, W.P. Cropper, Jr., D.W. Johnson, B. Zeide, R. L. Amateis, H.E. Burkhart, V. Clark Baldwin, Jr., K.D. Peterson, S. Fox, S.G. McNulty, and R.A. Mickler. 2002. Addressing multi-use issues in sustainable forest management with signal-transfer modeling. *Forest Ecology and Management* 165:295-304. doi:10.1016/S0378-1127(01)00631-4
- Lirman, D. and W.P. Cropper, Jr. 2003. The influence of salinity on seagrass growth, survivorship, and distribution within Biscayne Bay, Florida: field, experimental, and modeling studies. *Estuaries* 26:131-141. <http://www.jstor.org/stable/1353198>
- Biber, P.D., M.A. Harwell, and W.P. Cropper, Jr. 2004. Modeling the dynamics of three functional groups of macroalgae in tropical seagrass habitats. *Ecological Modelling* 175:25-54. doi:10.1016/j.ecolmodel.2003.10.003
- Cropper, W.P., Jr. 2004. Forest dynamics and disturbance regimes. Studies from temperate evergreen-deciduous forests. (book review) *Agricultural and Forest Meteorology*. 123:237. doi:10.1016/j.agrformet.2003.12.004
- Irlandi, E.A., B.A. Orlando, and W.P. Cropper, Jr. 2004. Short-term effects of nutrient addition on growth and biomass of *Thalassia testudinum* in Biscayne Bay, FL. *Florida Scientist* 67:18-26.
- Cropper, W.P., Jr. and P.J. Anderson. 2004. Population dynamics of a tropical palm: Use of a genetic algorithm for inverse parameter estimation. *Ecological Modelling* 177:119-127. doi:10.1016/j.ecolmodel.2004.02.003

- Cropper, W.P., Jr. and N.B. Comerford. 2005. Optimizing simulated fertilizer additions using a genetic algorithm with a nutrient uptake model. *Ecological Modelling* 185:271-281. doi:10.1016/j.ecolmodel.2004.12.010
- Comerford, N.B., W.P. Cropper, Jr., H. Li, P.J. Smethurst, K. Van Rees, E.J. Jokela, H. Adegbidi, and N.F. Barros. 2006. Soil supply and nutrient demand (SSAND): A nutrient uptake model and its application to forest management. *Canadian Journal of Soil Science* 86:665-673. doi:10.4141/S05-112
- Comerford, N.B., W. Cropper, P.F. Grierson, Q. Araujo and S. Jose. 2006. Modeling P bioavailability and uptake in agroforestry systems. pp. 303-317 In: Da Gama-Rodrigues et al. (Eds.) *Sistemas Agroflorestais. Bases Cientificas para o Desenvolvimento Sustentavel*. Sociedade Brasileira de Sistemas Agroflorestais. Universidade estadual do Norte Fluminense Darcy Ribeiro. Campos dos Goytacazes, RJ, Brasil.
- Cropper, W.P., Jr. and E.L. Loudermilk. 2006. The interaction of seedling density-dependence and fire in a matrix population model of longleaf pine (*Pinus palustris*). *Ecological Modelling* 198:487-494. doi:10.1016/j.ecolmodel.2006.05.034
- Loudermilk, E.L., A. Singhania, J. Fernandez, J. Kevin Hiers, J.J. O'Brien, W.P. Cropper, Jr. and K.C. Slatton. 2007. Application of ground-based LIDAR for fine-scaled forest fuel modeling. In: Proceedings of The 2nd Fire Behavior and Fuels Conference. The Fire Environment – Innovations, Management, and Policy; Destin Florida, March, 2007. Rocky Mountain Research Station, U.S. Department of Agriculture, Forest Service Proceedings RMRS-P-46CD. <http://www.treesearch.fs.fed.us/pubs/28596>
- Loudermilk, E.L. and W.P. Cropper, Jr. 2007. Multi-scale modeling of longleaf pine (*Pinus palustris*). *Canadian Journal of Forest Research* 37:2080-2089. doi:10.1139/X07-070
- Epps, K.Y., N.B. Comerford, J.B. Reeves, III, W.P. Cropper, Jr., Q. R. Araujo. 2007. Chemical diversity - Highlighting a species richness and ecosystem function disconnect. *Oikos* 116:1831-1840. doi: 10.1111/j.2007.0030-1299.15853.x
- Valle, D.R., C. Staudhammer, and W.P. Cropper, Jr. 2007. Simulating nontimber forest management in tropical mixed forests. *Journal of Forestry* 105:301-306.
- Shoemaker, D.A. and W.P. Cropper, Jr. 2008. Prediction of leaf Area Index for Southern Pine Plantations From Satellite Imagery Using Regression and Artificial Neural Networks. pp. 139-160 In P. Bettinger, K. Merry, S. Fei, J. Drake, N. Nibblelink and J. Hepinstall (Eds). *Proceedings of the 6<sup>th</sup> Southern Forestry and Natural Resources GIS Conference* (2008). <http://soforgis.net/2008/presentations/>
- Holm, J.A., C.J. Miller, and W.P. Cropper, Jr. 2008. Population dynamics of the dioecious Amazonian palm *Mauritia flexuosa*: Simulation analysis of sustainable harvesting. *Biotropica* 40:550-558. doi: 10.1111/j.1744-7429.2008.00412.x
- Powell, T.L., H.L. Gholz, K.L. Clark, G. Starr, W.P. Cropper, Jr. and T.A. Martin. 2008. Carbon exchange of a naturally-regenerated pine forest in north Florida. *Global Change Biology* 14:2523-2538. doi:10.1111/j.1365-2486.2008.01675.x
- Lee, H., C. Slatton, B. Roth, and W.P. Cropper, Jr.. 2009. Prediction of forest canopy sunlight distribution using airborne lidar data. *International Journal of Remote Sensing* 30:189-207. doi: 10.1080/01431160802261171
- Zamora, D.S., S. Jose, J.W. Jones, and W.P. Cropper, Jr.. 2009. Modeling cotton production in a pecan alleycropping system using CROPGRO. *Agroforestry Systems* 76:423-435. doi:10.1007/s.10457-008.9166.x

Loudermilk, E.L., J.K. Hiers, J.J. O'Brien, R.J. Mitchell, A. Singania, J.C. Fernandez, W.P. Cropper, Jr., and K.C. Slatton. 2009. Ground-based LIDAR: A novel approach to quantify fine-scale fuelbed. *International Journal of Wildland Fire* 18:676-685.  
doi: 10.1071/WF07138

Valle, D., C.L. Staudhammer, W.P. Cropper, Jr. and P. van Gardingen. 2009. The importance of multimodel projections to assess uncertainty in projections from simulation models. *Ecological Applications* 19:1680-1692.  
doi: 10.1890/08-1579

Lee, H., C. Slatton, B. Roth, and W.P. Cropper, Jr. 2010. Adaptive clustering of airborne LiDAR data to segment individual tree crowns in managed pine forests. *International Journal of Remote Sensing* 31:117-139.  
doi: 10.1080/01431160902882561

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