

Our Most Important Product: Knowledge



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Each year our scientists publish several hundred journal articles, book chapters, presentation papers, Southern Research Station publications, and other materials. The publications are sorted according to the primary cross-cutting theme (CCT) that they support, but many of them relate to more than one CCT, as well as the three emphasis areas in our Strategic Framework as well. The final section "Foundation Programs" lists materials that relate to multiple CCTs, continue important studies that are in addition to the CCTs, and also to the Forest Service Natural Resource Agenda. Many of these publications are available online at the Southern Research Station Web Site: <http://www.srs.fs.fed.us/pubs/index.htm>

Southern Pines

Abrahamson, Deborah A.; Dougherty, P.M.; Zarnoch, S.J. 1998. Hydrological components of a young loblolly pine plantation on a sandy soil with estimates of water use and loss. *Water Resources Research*. 34(12): 3503-3513.

Achtemeier, Gary L. 1998. A framework for standardizing flight characteristics for separating biology from meteorology in long-range insect transport. In: The 23rd conference on agricultural and forest meteorology, 13th conference on biometeorology and aerobiology, 2^d urban environment symposium; 1998 November 2-6; Albuquerque, NM. Boston: American Meteorological Society: 360-363.

Achtemeier, Gary L. [n.d.] Smoke management: toward a data base to validate PB-Piedmont-numerical simulation of smoke on the ground at night. In: Proceedings, TAPPI international environmental conference; 1999 April 18-21; Nashville, TN. Atlanta: TAPPI Press: 433-442.

Anderson, Matt; Somers, Greg L.; Smith, W. Rick [and others]. 1999. Measuring crown dynamics of longleaf pine in the sandhills of Eglin Air Force Base. In: Proceedings, 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance. 4: 46-48.

Anderson, Matthew; Smith, Rick; Freeland, Mickey. 1999. The relationship of sapwood basal area to leaf area of sandhills longleaf pine. Presented at the western mensurationist meeting; 1999 June 21-22; Penticton, BC. [Poster].

Aust, W. Michael; Burger, James A.; Carter, Emily A. [and others]. 1998. Visually determined soil disturbance classes used as indices of forest harvesting disturbance. *Southern Journal of Applied Forestry*. 22(4): 245-250.

Baldwin, V. Clark, Jr.; Leduc, Daniel J.; Ferguson, Robert B. [and others]. 1998. The not-so-sudden results of the sudden saw log study-growth and yield through age 45. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 574-578.

Baldwin, V. Clark, Jr.; Leduc, Daniel J.; Peterson, K.D.; Parresol, Bernard R. 1999. Basic growth relationships in thinned and unthinned longleaf pine plantations. In: Kush, J.S., comp. Longleaf pine: a forward look: Proceedings of the 2^d Longleaf Alliance conference; 1998 November 13-19; Charleston, SC. Andalusia, AL: The Longleaf Alliance. 4: 49-51.

Barnett, James P. 1997. Relating pine seed coat characteristics to speed of germination, geographic variation, and seedling development. *Tree Planters' Notes*. 48(1-2): 38-42.

Barnett, James P. 1998. Oleoresin capicum has potential as a rodent repellent in direct seeding longleaf pine. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 326-328.

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Barnett, James P.; Burton, James D. 1997. Osage-orange: a pioneering stewardship species. *Tree Planters' Notes*. 48(3/4): 81-86.

Barnett, James P.; McGilvray, J.M. 1999. Guidelines for producing longleaf pine seedlings in containers. In: Kush, J.S., comp. Longleaf pine: a forward look: Proceedings of the 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Andalusia, AL: The Longleaf Alliance. 4: 56-58.

Barnett, James P.; Pickens, Bill; Karrfalt, Robert. 1999. Longleaf pine seed presowing treatments: effects on germination and nursery establishment. In: Landis, T.D.; Barnett, James P., tech. coords. National proceedings: forest and conservation nursery associations-1 998; 1998 July 13-17; Lafayette, LA. Gen. Tech. Rep. SRS-25. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 43-46.

Barnett, Jim. 1999. Tree planting-forests made by hand. *Forests & People*. 49(2):12-14.

Brockway, Dale G. 1998. Forest plant diversity at local and landscape scales in the Cascade Mountains of southwestern Washington. *Forest Ecology and Management*. 109: 323-341.

Brockway, Dale G.; Wolters, Gale L.; Pearson, Henry A. [and others]. 1998. Understory plant response to site preparation and fertilization of loblolly and shortleaf pine forests. *Journal of Range Management*. 51(1): 47-54.

Buford, Marilyn A.; Stokes, Bryce J.; Sanchez, Felipe G.; Carter, Emily A. 1999. Developing systems for integrating bioenergy into environmentally sustainable forestry. In: Lowe, A.T.; Smith, C.T., comp. Proceedings of IEA bioenergy task 18 workshop and joint workshop with task 25: developing systems for integrating bioenergy into environmentally sustainable forestry; 1998 September 7-11; Nokia, Finland. For. Res. Bull. 211. Rotorua, New Zealand: New Zealand Forest Research Institute: 97-103.

Buford, Marilyn A.; Stokes, Bryce J.; Sanchez, Felipe G.; Carter, Emily A. 1999. Using biomass to improve site quality and carbon sequestration. In: Lowe, A.T.; Smith, C.T., comps. Proceedings of the international energy agency bioenergy agreement task 18; 1998 September 7-11; Nokia, Finland. Rotorua, New Zealand: New Zealand Forest Research Institute. 211: 97-103.

Busby, Rodney L.; Miller, James H.; Edwards, M. Boyd, Jr. 1998. Economics of site preparation and release treatments using herbicides in central Georgia. *Southern Journal of Applied Forestry*. 22(3): 156-162.

Cain, M.D. 1998. A 9-year comparison of hardwood control treatments for enhancing natural regeneration and growth of loblolly-shortleaf pines in an uneven-aged stand. In: Dusky, Joan A., ed. Proceedings, 51st annual meeting of the southern weed science society; 1998 January 26-28; Birmingham, AL. Champaign, IL: Southern Weed Science Society: 235-240.

Cain, Michael D. 1998. Woody and herbaceous competition effects on stand dynamics and growth of 13-year-old natural, precommercially thinned loblolly and shortleaf pines. In: Wagner, Robert G.; Thompson, Dean G., comps. 3rd international conference on forest vegetation management: popular summaries; 1998 August 24-28; Sault Ste. Marie, Ontario. For. Res. Inf. Pap. 141. Sault Ste. Marie, Ontario: Ontario Ministry of Natural Resources, Forest Research Institute: 398-400.

Carter, Emily A.; McDonald, Timothy P. 1998. Interaction among machine traffic, soil physical properties and loblolly pine root proliferation in a Piedmont soil. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 368-372.

Carter, Gregory A.; Seal, Michael R.; Haley, Tim. 1998. Airborne detection of southern pine beetle damage using key spectral bands. *Canadian Journal of Forest Research*. 28(0): 1040-1045.

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Southern Pines

Clark, Alexander, III; McAlister, Robert H. 1998. Visual tree grading systems for estimating lumber yields in young and mature southern pine. *Forest Products Journal*. 48(10): 59-67.

Clark, Alexander, III; McMinn, James W. 1999. Species composition, tree quality and wood properties of southern pine stands under ecosystem management on national forests in the Piedmont and Coastal Plains. In: *Proceedings, TAPPI international environmental conference; 1999 April 18-21; Nashville, TN. Atlanta: TAPPI Press: 639-645.*

Cutter, Bruce E. 1996. Effects of grazing on tree/wood quality in pine. [Place of publication unknown]; [Publisher unknown]. [Number of pages unknown].

de Groot, P.; DeBarr, G.L. 1998. Factors affecting capture of the white pine cone beetle, *Conophthorus coniperda* (Schwarz) (Col., Scolytidae, in pheromone traps). *Journal of Applied Entomology*. 122: 281-286.

de Groot, Peter; DeBarr, Gary L.; Birgersson, Goran. 1998. Field bioassays of synthetic pheromones and host monoterpenes for *Conophthorus coniperda* (Coleoptera: Scolytidae). *Environmental Entomology*. 27(2): 382-387.

Dicus, Christopher A.; Dean, Thomas J. 1998. Stand density effects on biomass allocation patterns and subsequent soil nitrogen demand. In: Waldrop, Thomas A., ed. *Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 564-568.*

Dwinell, L.D.; Fraedrich, S.W. 1998. Effect of dazomet rate and incorporation method on pine production in southern pine nurseries. In: *Proceedings of the annual international research conference on methyl bromide alternatives and emissions reductions; 1998 December 7-9; Orlando, FL. [Place of publication unknown]; [Publisher unknown]: 97-1 to 97-3.*

Dwinell, L. David. 1999. Contamination of pine seeds by the pitch canker fungus. In: Landis, T.D.; Barnett, James P., tech. coords. *National proceedings: forest and conservation nursery associations-1998; 1998 July 13-17; Lafayette, LA. Gen. Tech. Rep. SRS-25. Asheville, NC: US. Department of Agriculture, Forest Service, Southern Research Station: 41-42.*

Ealy, Marc John. 1998. Activity patterns of the Louisiana pine snake in eastern Texas. Nacogdoches, TX: Stephen F. Austin State University. 74 p. MS. thesis.

Edwards, John W.; Loeb, Susan C.; Guynn, David C., Jr. 1998. Use of multiple regression and use-availability analyses in determining habitat selection by gray squirrels (*Sciurus carolinensis*). In: Steele, M.A.; Merritt, J.F.; Zegers, D.A., eds. *Proceedings of the international colloquium on the ecology of tree squirrels; 1994 April 22-28; [Place of meeting unknown]. [Place of publication unknown]: Virginia Museum of Natural History: 87-97.*

Ewers, Brent E.; Oren, Ram; Albaugh, Timothy J.; Dougherty, Phillip M. 1999. Carry-over effects of water and nutrient supply on water use of *Pinus taeda*. *Ecological Applications*. 9(2): 513-525.

Farrar, Robert M., Jr. 1999. Prescribed burning in selection stands of southern pine: current practice and future promise. In: Pruden, Teresa L.; Brennan, Leonard A., eds. *Fire in ecosystem management: shifting the paradigm from suppression to prescription: Tall Timbers fire ecology conference proceedings; 1996 May 7-10; Boise, ID. Tallahassee, FL: Tall Timbers Research Station. 20: 151-160.*

Faust, Timothy D.; Clark, Alexander, III; Courchene, Charles E. [and others]. 1999. Effects of intensive forest management practices on wood properties and pulp yield of young, fast growing southern pine. In: *Proceedings, TAPPI international environmental conference; 1999 April 18-21; Nashville, TN. Atlanta: TAPPI Press: 501-512.*

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Southern Pines

Fore, Chuck; Barnett, James I? 1999. Effects of spring versus fall sowing of longleaf pine seeds in the nursery on field performance. In: Landis, T.D.; Barnett, James P., tech. coords. National proceedings: forest and conservation nursery associations- 1998; 1998 July 13- 17; Lafayette, LA. Gen. Tech. Rep. SRS-25. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 47-49.

Fraedrich, Stephen W.; Dwinell, L. David. 1998. Evaluation of fumigants for pest management and seedling production in southern pine nurseries, In: Proceedings, annual international research conference on methyl bromide alternatives and emissions reductions; 1998 December 7-9; Orlando, FL. [Place of publication unknown]: [Publisher unknown]: 33-1 to 33-3.

Franzreb, Kathleen E. 1999. Factors that influence translocation success in the red-cockaded woodpecker. *Wilson Bulletin*. III(1): 38-45.

Froelich, R.C.(deceased); Schmidting, R.C. 1998. Survival of slash pine having fusiform rust disease varies with year of first stem infection and severity. *Journal of Applied Forestry*. 22(2): 96- 100.

Gan, Jianbang; Kolison, Stephen H., Jr.; Miller, James H. 1998. Public preferences of loblolly pine (*Pinus taeda*) stands generated by different site preparation methods. In: Wagner, R.G.; Thompson, D.G., comps. 3rd international conference on forest vegetation management: popular summaries: 1998 August 24-28; Sault Ste. Marie, Ontario. Sault Ste. Marie, Ontario: Ontario Forest Research Institute. 141: 97-99.

Gong, Weiwen. 1998. Experimental analysis of finger blood flow in workers exposed to hand-arm vibration, Auburn, AL: Auburn University. 102 p. Ph.D. dissertation.

Grace, J. McFero, III. 1999. Control of sediment export from the forest road prism. Presented at 1999 ASAE annual international meeting: emerging technologies for the 21st century; 1999 July 18-21; Toronto, Ontario. Tech. Pap. 995048. St. Joseph, MI: American Society of Agricultural Engineers. 17 p.

Greenberg, Cathryn H. 1999. Metapopulation dynamics of amphibians using isolated, ephemeral ponds in longleaf pine uplands of Florida. In: Kush, John S., comp. Longleaf pine: a forward look: Proceedings of the 2d Longleaf Alliance conference; 1998 November 17- 19; Charleston, SC. Rep. 4. Andalusia, AL: The Longleaf Alliance: 92-95.

Greenberg, Cathryn H.; Simons, Robert W. 1999. Age, composition, and stand structure of old-growth oak sites in the Florida high pine landscape: implications for ecosystem management and restoration. *Natural Areas Journal*. 19(1): 30-40.

Groninger, John W.; Johnsen, Kurt H.; Seiler, John R. [and others]. 1999. Elevated carbon dioxide in the atmosphere-what might it mean for loblolly pine plantation forestry. *Journal of Forestry*. 7(July): 4- 10.

Harrington, Timothy B.; Edwards, M. Boyd. 1998. Diameter distributions and basal area of pines and hardwoods 12 years following various methods and intensities of site preparation in the Georgia Piedmont, In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 579-582.

Haywood, James D.; Boyer, William D.; Harris, Finis L. 1998. Plant communities in selected longleaf pine landscapes on the Catahoula Ranger District, Kisatchie National Forest, Louisiana. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 86-91.

Haywood, James D.; Elliott-Smith, Michael L.; Knight, Robert A. [and others]. 1998. Harvesting longleaf pine straw on the Kisatchie National Forest, Louisiana. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 118- 119.

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Southern Pines

Haywood, James D.; Martin, Alton, Jr.; Harris, Finis L.; Elliott-Smith, Michael L. 1998. Restoration of native plant communities in longleaf pine landscapes on the Kisatchie National Forest, Louisiana. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 120-121

Haywood, James D.; Martin, Alton, Jr.; Pearson, Henry A.; Grelen, Harold E. 1998. Seasonal biennial burning and woody plant control influence native vegetation in loblolly pine stands. Res. Pap. SRS-14. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 8 p.

Hedrick, Larry D.; Hooper, Robert G.; Krusak, Dennis L.; Dabney, Joseph M. 1998. Silvicultural systems and red-cockaded woodpecker management: another perspective. *Wildlife Society Bulletin*. 26(1): 138-147.

Hermann, SM.; VanHook, T.; Flowers, R.W. [and others]. 1998. Fire and biodiversity: studies of vegetation and arthropods. In: Wadsworth, Kelly G., ed. Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in challenging times; 1998 March 20-24; Orlando, FL. Washington, DC: Wildlife Management Institute: 384-401.

Hess, Nolan J.; Orosina, William J.; Jones, John P. [and others]. 1999. Reassessment of loblolly pine decline on the Oakmulgee District, Talladega National Forest, Alabama. For. Health Rep. 99-2-03. Atlanta: U.S. Department of Agriculture, Forest Service, Southern Region, State and Private Forestry. 13p.

Holtzschler, **Mathew A.**; Lanford, Bobby L. 1997. Tree diameter effects on cost and productivity of cut-to-length systems. *Forest Products Journal*. 47(3): 25-30.

Hse, Chung Y.; Bryant, Ben S. 1993. Mechanical and physical properties of wood fiber-reinforced sulfur-based wood composites. In: Hse, Chung-Yun; Branham, Susan J.; Chou, Chuh, eds. Adhesive technology and bonded tropical wood products, Taiwan, China: Taiwan Forestry Research Institute: 572-580.

Huebschmann, Michael M.; Lynch, Thomas B.; Murphy, Paul A. 1998. Shortleaf pine stand simulator: an even-aged natural shortleaf pine growth-and-yield model: user's manual. Oklahoma Agric. Exp. Stn. Rep. P-967. Stillwater, OK: Oklahoma Agricultural Experiment Station. 25 p.

Hwang, Chin-Yin; Hse, Chung Y.; Choong, Elvin T. 1999. Effect of configuration and some processing variables on the properties of wood fiber-polyethylene composites. In: Wang, Song-Yung; Yeh, Min-Chyuan, eds. Proceedings: international conference on effective utilization of plantation timber: timber and wood composites for the next century; 1999 May 21-23; Chi-Tou, Taiwan, R.O.C. [Taiwan]: Forest Products Association of R.O.C.: 16: 123-130.

Johnson, D.W. 1999. Simulated nitrogen cycling response to elevated CO₂ in *Pinus taeda* and mixed deciduous forests. *Tree Physiology*. 19: 321-327.

Johnson, Dale W.; Mitchell, Myron J. 1998. Responses of forest ecosystems to changing sulfur inputs. In: Maynard, Douglas G., comp., ed. Sulfur in the environment. New York: Marcel Dekker, Inc.: 219-262.

Kabango, Kabwayi. 1999. Valuation of nonpriced forest outputs from the industrial forests in southern Alabama. Tuskegee, AL: Tuskegee University. 65 p. M.S. thesis,

Klepzig, Kier D; Nettleton, Wes. 1999. SPB update. June. 4 p. [Brochure]. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, 2500 Shreveport Highway, Pineville, LA.

Klepzig, Kier D; Nettleton, Wes. 1999. SPB update. Winter. 4 p. [Brochure]. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, 2500 Shreveport Highway, Pineville, LA.

Klepzig, Kier D; Schlyter, Fredrik. 1999. Laboratory evaluation of plant-derived antifeedants against pine weevil, *Hylobius abietis* (Coleoptera: Curculionidae). *Journal of Economic Entomology*. 92: 644-650.

Koehn, Anita C.; Doudrick, Robert L. 1999. Diurnal patterns of chlorophyll fluorescence and CO₂ fixation in orchard grown *torreya taxifolia* (arn). *Journal of the Torrey Botanical Society*. 126(2): 93-98.

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Southern Pines

Kuehler, E.A.; Flagler, R.B. 1999. The effects of sodium erythorbate and ethylenediurea on photosynthetic function of ozone-exposed loblolly pine seedlings. *Environmental Pollution*. 105(1999): 25-35.

Kush, John S.; Boyer, William D.; Meldahl, Ralph S.; Ward, George A. 1999. Precommercial thinning intensity in longleaf pine: effect on product volume and value. In: 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance. 4: 106-108.

Kush, John S.; Meldahl, Ralph S. 1998. An old-growth longleaf stand in south Alabama: study of an endangered ecosystem. Alabama Agricultural Experiment Station. Highlights of Agricultural Research. 45(1): 3-4.

Kush, John S.; Meldahl, Ralph S.; Boyer, William D. 1999. Understory plant community response after 23 years of hardwood control treatments in natural longleaf pine (*Pinus palustris*) forests. *Canadian Journal of Forest Research*. 29(7): 1047-1054.

Kush, John S.; Meldahl, Ralph S.; Boyer, William D. 1998. Understory plant community response after 23 years of hardwood control treatments in natural longleaf pine (*Pinus palustris*) forests, In: Wagner, R.G.; Thompson, D.G., comps. 3rd international conference on forest vegetation management: popular summaries; [Date of meeting unknown]; Sault Ste Marie, Ontario. Sault Ste. Marie, Ontario: Forest Research Institute. 141: 428-430.

Kush, John S.; Varner, J. Morgan; Meldahl, Ralph S. 1999. Slow down, don't burn too fast... got to make that old-growth last. In: Proceedings, 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance. 4: 109-111.

Landis, T.D.; Barnett, James P. 1999. Forest and conservation nursery associations-1 998. In: Landis, T.D.; Barnett, J.P., tech coords. National proceedings: forest and conservation nursery associations-1998; Gen. Tech. Rep. SRS-25. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 192.

Lavdas, Leonidas G. 1997. Accuracy of National Weather Service wind-direction forecasts at Macon and Augusta, Georgia. *National Weather Digest*. 22(1): 22-26.

Leduc, Daniel J.; Matney, Thomas G.; Baldwin, V. Clark. 1999. Diameter distribution of longleaf pine plantations-a neural network approach. In: Kush, J.S. In: Proceedings, 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance 4: 112-114.

Loeb, Susan C. 1999. Responses of small mammals to coarse woody debris in a southeastern pine forest. *Journal of Mammalogy*. 80(2): 460-471.

Madsen, Dana L.; Walker, Joan L. 1999. Effects of time since fire and site on seed production in *Macbridea alba*, a rare mint. Presented at the 1999 annual meeting of the association of southeastern biologists; 1999 April 14-17; Wilmington, NC. [Poster].

Madsen, Dana Lynn. 1999. Seed production and germination studies of *Macbridea alba*. Clemson, SC: Clemson University. 113 p. M.S. thesis.

Mangini, A.C.; Barber, L.R.; Cameron, R.S. [and others]. 1998. A southwide rate test of azinphosmethyl (Guthion) for cone and seed insect control in loblolly pine seed orchards. *Southern Journal of Applied Forestry*. 22(2): 106-110.

McDonald, Tim. 1999. Time study of harvesting equipment using GPS-derived positional data. Technical presentation: forestry engineering for tomorrow; 1999 June 28-30; Edinburgh, Scotland. Bedford, UK: Institution of Agricultural Engineers. 8 p.

McDonald, Tim; Carter, Emily; Taylor, Steve; Torbert, John. 1998. Relationship between site disturbance and forest harvesting equipment traffic. In: 2^d southern forestry GIS conference; 1998 October 28-29; Athens, GA. Athens, GA: University of Georgia Center for Continuing Education, Daniel B. Warnell School of Forest Resources: 85-92.

Our Most Important Product: Knowledge

Southern Pines

McKeand, S.E.; Bridgwater, F.E. 1998. A strategy for the third breeding cycle of loblolly pine in the Southeastern U.S. *Silvae Genetica*. 47(4): 223-234.

McMahon, Charles K. 1999. Longleaf pine ecosystem research sponsored by the U.S. Department of Agriculture, Forest Service, Southern Research Station. In: Proceedings, 2d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance. 4: 121-124.

Mejeur, Randall. 1995. Effects of fire on the reproductive ecology of *Tephrosia virginiana* (L.) Pers. in the Carolina Sandhills. Athens, GA: University of Georgia. 79 p. MS. thesis.

Mihelcic, Nenad. 1998. Pathogenic microorganisms associated with pine tip moths and southern pine coneworms attacking southern pines. [Place of publication unknown]: The University of Georgia. 43 p. M.S. thesis.

Miller, James H.; Boyd, Robert S.; Edwards, M. Boyd. 1998. Residual effects of forestry herbicides on floristic diversity, stand structure, and composition 11 years after site preparation treatments. In: Wagner, R.G.; Thompson, D.G., comp. 3rd international conference on forest vegetation management: popular summaries; 1998 August 24-28; Sault Ste. Marie, Ontario. Sault Ste. Marie, Ontario: Ontario Forest Research Institute. 141: 205-207.

Miller, James H.; Boyd, Robert S.; Edwards, M. Boyd. 1999. Floristic diversity, stand structure, and composition 11 years after herbicide site preparation. *Canadian Journal of Forest Research*. 29 (7): 1073-1083.

Miller, James H.; Gan, Jianbang; Kolison, Stephen H. [and others]. 1998. A multi-attribute assessment of site preparation effects on the socioeconomical and ecological attributes of loblolly pine (*Pinus taeda*) stands. In: Wagner, R.G.; Thompson, D.G., comps. 3rd international conference on forest vegetation management: popular summaries; 1998 August 24-28; Sault Ste. Marie, Ontario. Sault Ste. Marie, Ontario: Ontario Forest Research Institute. 141: 445-447.

Miller, T.; Gramacho, K.P.; Schmidt, R.A. [and others]. 1998. Responses of wound, inoculated seedlings of *Pinus elliotii* var. *elliotii* and *Pinus taeda* to mycelial cultures derived from multiple and single basidiospores of *Cronartium quercuum* f. sp. fusiform. In: 1st IUFRO rusts of forest trees working party conference; 1998 August 2-7; Saariselka, Finland. Metla, Finland: Finnish Forest Research Institute, Rovaniemi Research Station. 712: 207-218.

Moffat, Steverson O.; Cabbage, Frederick W.; Cascio, Anthony J.; Sheffield, Raymond M. 1999. The future of forest management on NIPF lands in the South: results of an expert opinion survey. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University. 8: 17-24.

Moorehead, David J.; Dangerfield, Coleman W., Jr.; Edwards, M. Boyd. 1998. Regulating stand density by precommercial thinning in naturally regenerated loblolly pine stands: evaluation of management and economic opportunities. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 202-204.

Muir, Ronald L., Jr.; Lauer, Dwight K.; Glover, Glenn R.; Miller, James H. 1998. Pine response and hardwood development after brushsawing and manual herbicide release of loblolly pine. In: Wagner, R.G.; Thompson, D.G., comps. 3rd international conference on forest vegetation management: popular summaries; 1998 August 24-28; Sault Ste. Marie, Ontario. Sault Ste. Marie, Ontario: Ontario Forest Research Institute. 141: 217-219.

Nakamura, Hitoshi; Kaneko, Shigeru; Spaine, Pauline C. 1998. Differences in molecular characteristics between *Cronartium quercuum* from Japan and fusiform rust from U.S.A. In: Jalkanen, Risto; Crane, Patricia (Pat) E.; Walla, James (Jim) A.; Aalto, Tarmo, eds. Proceedings of the international union of forestry research organizations rusts of forest trees working party conference; 1998 August 2-7; Saariselka, Finland. Metla, Finland: Finnish Forest Research Institute. 712: 23.5 241.

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Southern Pines

Otrosina, William J. 1998. Diseases of forest trees: consequences of exotic ecosystems? In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 103-106.

Outcalt, Kenneth W. 1998. Needs and opportunities for longleaf pine ecosystem restoration in Florida. In: Kush, John S., comp. Proceedings of the longleaf pine ecosystem restoration symposium; 1997 November 12-15; Fort Lauderdale, FL. Auburn, AL: The Longleaf Alliance: 38-43.

Outcalt, Kenneth W.; Greenberg, Cathryn H. 1998. A stand-replacement prescribed burn in sand pine scrub. In: Pruden, Teresa L.; Brennan, Leonard A., eds. Proceedings: 20th Tall Timbers fire ecology conference: fire in ecosystem management: shifting the paradigm from suppression to prescription; 1996 May 7-10; Boise, ID. Tallahassee, FL: Tall Timbers Research Station. 20: 141-145.

Parmer, Andrea M. 1999. Assessment of the economic efficiency and environmental impact of the major timber harvesting systems in Alabama. Tuskegee, AL: Tuskegee University. 61 p. M.S. thesis.

Pederson, Neil; Kush, John S.; Meldahl, Ralph S. 1999. Correlating climate and longleaf pine cone crops: is there a connection? In: Proceedings: 2nd Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance. 4: 140-143.

Perry, Roger W.; Mangini, Alex. 1997. A comparison of trap versus ground collection of acorns to assess insect infestation. *Journal of Entomological Science*. 32(4): 412-415.

Raja, Rajiv G.; Tauer, Charles G.; Wittwer, Robert F.; Haug, Yinghua. 1998. Regeneration methods affect genetic variation and structure in shortleaf pine (*Pinus echinata* Mill.). *Forest Genetics*. 5(3): 171-178.

Reeve, John D.; Rhodes, Douglas J.; Turchin, Peter. 1998. Scramble competition in the southern pine beetle, *Dendroctonus frontalis*. *Ecological Entomology*. 23: 433-443.

Richter, Daniel D.; Markewitz, Daniel; Trumbore, Susan E.; Wells, Carol G. 1999. Rapid accumulation and turnover of soil carbon in a re-establishing forest. *Nature*. 400(July): 56-58.

Rummer, Robert B. 1999. Forest engineering research: 30 years of research to support forest operations. Auburn, AL: Auburn University Educational Television. [55-minute video].

Saenz, Daniel; Conner, Richard N.; Shackelford, Clifford E.; Rudolph, D. Craig. 1998. Pileated woodpecker damage to red-cockaded woodpecker cavity trees in eastern Texas. *Wilson Bulletin*. 110(3): 362-367.

Sampson, D.A.; Allen, H. Lee. 1998. Light attenuation in a 14-year-old loblolly pine stand as influenced by fertilization and irrigation. *Trees*. 13(june): 80-87.

Schaefer, Richard R.; Saenz, Daniel. 1998. Red-cockaded woodpecker cavity tree resin avoidance by southern flying squirrels. *The Wilson Bulletin*. 110(2): 291-292.

Schmidtling, R.C. 1999. Longleaf pine genetics. In: Proceedings of the 2nd Longleaf Alliance conference; 1999 November 17-19; Charleston, SC. Charleston, SC: The Longleaf Alliance. 4: 24-26.

Schmidtling, R.C.; Hipkins, V. 1998. Genetic diversity in longleaf pine (*pinus palustris*): influence of historical and prehistorical events. *Canadian Journal of Forest Research*. 28(8): 1135-1145.

Schmidtling, Ronald C.; Carroll, E.; LaFarge, T. 1999. Allozyme diversity of selected and natural loblolly pine populations. *Silvae Genetica*. 48: 35-45.

Scholl, Eric R.; Waldrop, Thomas A. 1999. Photos for estimating fuel loadings before and after prescribed burning in the upper Coastal Plain of the Southeast. Gen. Tech. Rep. SRS-26. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 25 p.

Seixas, Fernando; Barbosa, Rafael Alex; Rummer, Robert. 1999. Noise level determination in forestry machines. Technical presentation: forestry engineering for tomorrow: machinery; 1999 June 28-30; Edinburgh, Scotland. Bedford, UK: Institution of Agricultural Engineers. 14 p.

Our Most Important Product: Knowledge

Southern Pines

Selgrade, James F. 1998. Using stocking or harvesting to reverse period-doubling bifurcations in discrete population models. *Journal of Difference Equations and Applications*. 4: 163-183.

Selgrade, James E; Roberds, James H. 1998. Reversing period-doubling bifurcations in models of population interactions using constant stocking or harvesting. *Canadian Applied Mathematics Quarterly*. 6(3): 207-231.

Shupe, Todd E; Hse, Chung Y. 1999. An overview of silvicultural influences on loblolly pine veneer-based panel properties. In: Wong, Song-Yung; Yeh, Min-Chyuan, eds. *Proceedings: international conference on effective utilization of plantation timber: timber and wood composites for the next century*; 1999 May 21-23; Chi-Tou, Taiwan, R.O.C. [Taiwan]: Forest Products Association of R.O.C. 16: 22-25.

Shupe, Todd F.; Hse, Chung Y.; Choong, Elvin T.; Groom, Leslie H. 1998. Effect of silvicultural practice and wood type on loblolly pine particleboard and medium density fiberboard properties. *Holzforschung*. 53(2): 215-222.

Smith, Rick; Anderson, Matthew; Freeland, Mickey [and others]. 1998. Jabberwocky: development of an ecological model of longleaf pine at Eglin Air Force Base, Presented at the Longleaf Alliance meeting; 1998 November 17-19; Charleston, SC. [Poster].

Smith, Rick; Anderson, Matthew; Freeland, Mickey [and others]. 1999. Jabberwocky: an individual-tree model for sandhills longleaf pine. Presented at the 1999 western mensurationist meeting; 1999 June 23-25; Penticton, BC. [Poster].

Snyder, C.S. 1998. Fertilizing pine forests in the Gulf Coastal Plain with nitrogen and phosphorus, *News & Views*, May: 1-2.

Somers, Greg; Smith, Rick; Anderson, Matthew [and others]. 1999. Jabberwocky: an individual-tree model for sandhills longleaf pine. Presented at a conference: toward the application of process models to sustainable management of southern pine forests; 1999 June 8-11; Asheville, NC. [Poster].

Spaine, Pauline C. 1998. Research on the biology of fusiform rust in the Southeastern United States. In: Jalkanen, Risto; Crane, Patricia (Pat) E.; Walla, James (Jim) A.; Aalto, Tarmo, eds. *Proceedings of the international union of forestry research organizations rusts of forest trees working party conference*; 1998 August 2-7; Saariselka, Finland. Metla, Finland: Finnish Forest Research Institute. 712: 231-234.

Stelzer, H.E.; Doudrick, R.L.; Kubisiak, T.L.; Nelson, C.D. [n.d.] Prescreening slash pine and *cronartium* pedigrees for evaluation of complementary gene action in fusiforme rust disease. *Plant Disease*. 83: 385-389.

Stiles, Judith H.; Jones, Robert H. 1998. Distribution of the red imported fire ant, *Solenopsis invicta*, in road and powerline habitats. *Landscape Ecology*. [13]([6]): 335-346.

Stokes, Bryce J.; Klepac, John F. 1998. Ecological technologies for small-diameter tree harvesting. In: *Proceedings: forest management into the next century: what will make it work*; 1997 November 19-21; Spokane, WA. Madison, WI: Forest Products Society: 95-101.

Strom, B.L.; Roton, L.M.; Goyer, R.A.; Meeker, J.R. [n.d.] Visual and semiochemical disruption of host finding in the southern pine beetle. *Ecological Applications*. 9(3): 1028-1038.

Strom, B.L.; Roton, L.M.; Hayes, J.L.; Goyer, R.A. 1996. The prospects of employing semiochemical and visual deterrents in protecting trees from bark beetles. In: Billings, Ronald F.; Nebeker, T. Evan, tech. eds. *Proceedings: North American forest insect work conference: forest entomology: vision 20:21*; 1996 April 8-12; San Antonio, TX. Lufkin, TX: Texas Forest Service. 160: 55-56.

Sun, Jianghua; Debarr, Gary L.; Berisford, C. Wayne; Schauff, Michael E. 1998. Description of a new primary parasitoid, *Zarhspalus Ashmead* (Hymenoptera: Encyrtidae) of *Oracella acuta* (Homoptera: pseudococcidae). *The Canadian Entomologist*, 130: 793-797.

Our Most Important Product: Knowledge

Southern Pines

Sword, M.A. 1998. Seasonal development of loblolly pine lateral roots in response to stand density and fertilization. In: Box, James E., Jr., ed. Root demographics and their efficiencies in sustainable agriculture, grasslands, and forest ecosystems: Proceedings of the 5th symposium of the international society of root research; 1996 July 14-18; Clemson, SC. Dordrecht, The Netherlands: Kluwer Academic Publishers: 105-113.

Sword, M.A. 1998. Seasonal development of loblolly pine lateral roots in response to stand density and fertilization. *Plant and Soil*. 200: 21-25.

Sword, Mary Anne; **Haywood**, James D.; **Andries**, C. Dan. 1998. Seasonal lateral root growth of juvenile loblolly pine after thinning and fertilization on a Gulf Coastal Plain site. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 194-201.

Sword, Mary Anne; **Tinus**, Richard W. 1999. Evaluating the cold hardiness of container-grown longleaf pine seedlings. In: Landis, T.D.; Barnett, J.P., tech. coords. National proceedings: forest and conservation nursery associations-i 998; Gen. Tech. Rep. SRS-25. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 50-52.

Tang, Zhenmin; Chambers, Jim. L.; Guddanti, Suresh [and others]. 1999. Seasonal shoot and needle growth of loblolly pine responds to thinning, fertilization, and crown position. *Forest Ecology and Management*. 120: 117-130.

Tang, Zhenmin; Chambers, Jim. L.; Guddanti, Suresh; Barnett, James P. 1999. Thinning, fertilization, and crown position interact to control physiological responses of loblolly pine. *Tree Physiology*. 19: 87-94.

Tauer, C.G.; Shah, Syed **Rashid** Hussain; Schmidling, R.C. 1998. Virginia pine (*pinus virginiana* mill.) provenance and progeny performance in Oklahoma. *Southern Journal of Applied Forestry*. 22(4): 209-215.

Tiarks, **Allan E.** 1999. Nutrient management in pine forests. In: Proceedings for the 15th annual Ark-La-Tex forestry forum: forestry 2000: what's down the road; 1999 March 19; Shreveport, LA. Benton, LA: Louisiana Cooperative Extension: 1-6.

Tiarks, **Allan E.**; Meier, Calvin E.; Baldwin, V. Clark, Jr.; **Haywood**, James D. 1998. Value of tree measurements made at age 5 years for predicting the height and diameter growth at age 25 years in loblolly pine plantations. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 537-541.

Tiarks, **Allan E.**; Nambiar, R.K.S. 1998. Site management and productivity in tropical forest plantations. Occas. Pap. 16. Jakarta, Indonesia: Center for International Forestry Research. 11 p.

Turchin, P.; Taylor, A.D.; Reeve, J.D. 1999. Dynamical role of predators in population cycles of a forest insect: an experimental test. *Science*. 285: 1068-1071.

Varner, J. Morgan; Kush, John S.; Meldahl, Ralph S. 1999. Old-growth montane longleaf pine forest age structure: preliminary assessment. In: Proceedings, 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Auburn, AL: Auburn University, Longleaf Alliance. 4: 170-t 74.

Wade, Dale D. 1998. A brief overview of the Southern United States fire situation, January-July 1998. *International Forest Fire News*. 19: 40-42.

Wade, Dale D. 1998. Conference summary and concluding remarks. In: Pruden, Teresa L.; Brennan, Leonard A., eds. Proceedings, 20th Tall Timbers fire ecology conference: fire in ecosystem management: shifting the paradigm from suppression to prescription; 1996 May 7-10; Boise, ID. Tallahassee, FL: Tall Timbers Research Station: 449-452.

Wade, Dale, ed. 1999. Students workbook: fire in Florida's ecosystems; grades 4-8 [Brochure]. Tallahassee, FL: Florida Department of Agriculture and Consumer Services, Division of Forestry. 2 p.

Our Most Important Product: Knowledge

Southern Pines

Wade, Dale; Custer, **George**; Thorsen, Jim [and others]. 1998. Reintroduction of fire into fire-dependent ecosystems: some southern examples. In: Pruden, Teresa L.; Brennan, Leonard A., eds. Proceedings, 20th Tall Timbers fire ecology conference: fire in ecosystem management: shifting the paradigm from suppression to prescription; 1996 May 7- 10; Boise, ID. Tallahassee, FL: Tall Timbers Research Station. 20: 94-98.

Wade, Dale; **Outcalt**, Ken. 1999. Prescription fire to manage southern pine plantations-damned if you do, damned if you don't. In: Proceedings: TAPPI international environmental conference; 1999 April 18-21; Nashville, TN. Atlanta: TAPPI Press: 455-460.

Walker, Joan L. 1999. Longleaf pine ecosystem restoration on small and mid-sized tracts. In: Proceedings of the 2^d Longleaf Alliance conference; 1998 November 17-19; Charleston, SC. Clemson, SC: Longleaf Alliance and Clemson University: 19-22.

Walker, Joan L. 1999. Longleaf pine forests and woodlands: old growth under fire! In: Miller, Gary L., ed. The value of old growth forest ecosystems of the Eastern United States: conference proceedings; 1993 August 26-28; Asheville, NC. [Place of publication unknown]: [Publisher unknown]: 33-40.

Walkinshaw, C.H. 1999. Promising resistance to fusiform rust from southeastern slash pines. Res. Pap. SRS-16. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 6 p.

Walkinshaw, Charles H.; Tiarks, **Allan E.** 1998. Effects of soil compaction and organic matter removal on morphology of secondary roots of loblolly pine. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 418-421.

Wang, Jingxin; Greene, W. Dale. 1999. An interactive simulation system for modeling stands, harvests, and machines. Journal of Forest Engineering. 10(1): 81-99.

Wang, Jingxin; Greene, W. Dale; Stokes, **Bryce J.** 1998. Stand, harvest, and equipment interactions in simulated harvesting prescriptions. Forest Products Society Journal. 48(9): 81-86.

Warren, Jeffrey M.; Allen, H. Lee; Booker, Fitzgerald L. 1999. Mineral nutrition, resin flow and phloem phytochemistry in loblolly pine. Tree Physiology. 19(10): 655-663.

West, Lee. 1998. Effects of soil fungi on tree seedling establishment in a southeastern Coastal Plain forest. Blacksburg, VA: Virginia Polytechnic Institute and State University. 37 p. M.S. thesis.

Wilhoit, J.H.; Samuelson, L.J. 1998. Experiences spreading organic solid wastes on forest land. Presented at 1998 ASAE annual international meeting: the imaginative world of engineering: engineering solutions for tomorrow; 1998 July 11- 16; Orlando, FL. Tech. Pap. 987031. St. Joseph, MI: American Society of Agricultural Engineers. 16 p.

Wilhoit, John; Ling, Qingyue; Rummer, Bob. 1999. Low-capital systems for thinning pine plantations. Technical presentation: forestry engineering for tomorrow: harvesting; 1999 June 28-30; Edinburgh, Scotland. Bedford, UK: Institution of Agricultural Engineers. 12 p.

Wilhoit, John; Rummer, Bob. 1999. Application of small-scale systems: evaluation of alternatives. Presented at 1999 ASAE/CSAE-SCGR annual international meeting: emerging technologies for the 21st century; 1999 July 18-21; Toronto, Ontario. Tech. Pap. 99-5056. St. Joseph, MI: American Society of Agricultural Engineers. 18 p.

Wilkins, Richard T.; Ayres, Matthew P.; **Lorio**, Peter L., Jr.; Hodges, John D. 1998. Environmental effects on pine tree carbon budgets and resistance to bark beetles. In: Mickler, R.A.; Fox, Susan, comps., eds. The productivity and sustainability of southern forest ecosystems in a changing environment. New York: Springer-Verlag: 591-616.

Xu, **Mingguang**; Harrington, Timothy B.; Edwards, M. Boyd. 1998. Detecting responses of loblolly pine stand development to site-preparation intensity: a modeling approach. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 528-530.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Southern Pines

Yates, Mark D.; Loeb, Susan C.; Guynn, David C., Jr. 1997. The effect of habitat patch size on small mammal populations. In:

Proceedings of the annual conference of the southeastern association of fish and wildlife agencies; [Date of meeting unknown]; [Place of meeting unknown], [Place of publication unknown]: [Publisher unknown]: 501-510.

Zhou, Minyi; Carter, Mason C.; Dean, Thomas J. 1998. Response of soil bulk density and mineral nitrogen to harvesting and cultural treatment. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Cen. Tech. Rep. SRS-20. Asheville, NC: US. Department of Agriculture, Forest Service, Southern Research Station: 395-400.

Zutter, B.R.; Miller, J.H.; Allen, H.L. [and others]. 1999. Fascicle nutrient and biomass responses of young loblolly pine to control of woody and herbaceous competitors. Res. Note 99-10. Auburn, AL: Auburn University, School of Forestry, Silvicultural Herbicide Cooperative. 15 p.

Zutter, B.R.; Miller, J.H.; Allen, H.L. [and others]. 1999. Fascicle nutrient and biomass responses of young loblolly pine to woody and herbaceous competitors. Canadian Journal of Forest Research. 29(7): 917-925.

Zutter, Bruce R.; Miller, James H.; Allen, H. Lee [and others]. 1998. Response of foliage of young loblolly pine to woody and herbaceous plant control. In: Wagner, R.G.; Thompson, D.G., comps. 3rd international conference on forest vegetation management: popular summaries; 1998 August 24-28; Sault Ste. Marie, Ontario. Sault Ste. Marie, Ontario: Ontario Forest Research Institute. 141: 381-383.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Forested Wetlands, Bottomland Hardwoods, and Streams

- Baker, Terrell Talmadge, III. [n.d.] Fire root dynamics on a forested floodplain and litter decomposition in four forested floodplain communities in the Southern United States. Auburn, AL: Auburn University. 118 p. Ph.D. dissertation.
- Batzer, D.P.; Braccia, A. 1999. Invertebrates associated with coarse woody debris in streams, upland forests, and wetlands: a review. In: Hatcher, Kathryn J., comp. Proceedings of the 1999 Georgia water resources conference; 1999 March 30-31; Athens, GA. Athens, GA: Institute of Ecology, University of Georgia: 299-302.
- Belli, Keith L.; Hart, Christopher P.; Hodges, John D.; Stanturf, John A.** 1999. Assessment of the regeneration potential of red oaks and ash on minor bottoms of Mississippi. Southern Journal of Applied Forestry. 23(3): 133-i 38.
- Bonnet-, Franklin T.; Summerville, K.O.** 1999. Production and quality of Atlantic white-cedar stands in coastal North Carolina. In: Shear, Theodore H.; Summerville, K.O., eds. Proceedings: Atlantic white-cedar: ecology and management symposium; 1997 August 6-7; Newport News, VA. Gen. Tech. Rep. SRS-27. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 76-79.
- Bruhn, Johann N.; Johnson, Thomas E.; Karr, Arthur L. [and others]. 1998. Identification of *Armillaria* field isolates using isozymes and mycelial growth characteristics. Mycopathologia. 142: 89-96.
- Burke, Marianne K.; Lockaby, B. Graeme; Conner, William H.** 1999. Aboveground production and nutrient circulation along a flooding gradient in a South Carolina Coastal Plain forest. Canadian Journal of Forest Research. 29: 1402-1 418.
- Burns, Gary Allen; Whiting, R. Montague, Jr.; **LeGrande, George M.; Dickson, James G.** 1999. Wildlife linkages: volumes and values of residual timber in riparian zones in eastern Texas. Forest Ecology and Management. 114: 321-327.
- Carter, Emily A.; **Aust, W. Michael; Burger, James A.; Patterson, Steven C.** 1998. Soil strength, volumetric water content, and soil roughness characteristics of a bedded wetpine flat. In: Waldrop, Thomas A., ed. 1998. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 401-405.
- Castleberry, Steven B.; Ford, W. Mark; Miller, Karl V.; Smith, Winston P.** 1999. White-tailed deer browse preferences in a southern bottomland hardwood forest. Southern Journal of Applied Forestry. 23(2): 78-82.
- Castleberry, Steven Bryan. [n.d.]. Herbivory and canopy opening size influences on forest regeneration in a southern bottomland hardwood forest. Athens, GA: University of Georgia. 82 p. MS. thesis.
- Chan, Samuel S.; Bailey, Margaret David; **Karnes, Daniel [and others].** 1997. The role of silviculture in the active management of riparian zone vegetation in the Oregon Coast Range: a partnership between researchers and managers. In: Communicating the role of silviculture in managing the national forests: Proceedings of the national silviculture workshop; 1997 May 19-22; Warren, PA. Gen. Tech. Rep. NE-238. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 190-197.
- Connor, Kristina F.; Kubiske, M.E.; Meier, C.A.; Gazal, R.M.** 1999. Ecophysiology research at Iatt Creek, a minor river bottom in Louisiana. Presented at the ecological society of America 84th annual meeting; 1999 August 8-12; Spokane, WA. [Poster].
- Devall, Margaret S; Garcia-France, Jose. 1999. Biología reproductiva de *piper auritum* (Piperaceae) en un bosque mesófilo de montana. Presented at the 7th Latin American botanical congress; 1998 October 18-24; Mexico City, Mexico. [Poster].
- Goelz, J.C.G.; Meadows, J.S. 1999. Precommercial thinning of water tupelo stands on the Mobile-Tensaw River Delta: third-year results. Res. Pap. SRS-17. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 6 p.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Forested Wetlands, Bottomland Hardwoods, and Streams

Grossman, Gary D.; Ratajczak, Robert E., Jr.; Crawford, Maurice K.; Freeman, Mary C. 1998. Assemblage organization in stream fishes: effects of environmental variation and interspecific interactions. *Ecological Monographs*. 68(3): 395-420.

Haag, Wendell R.; Warren, Melvin L., Jr. 1998. Freshwater mussels of the Delta National Forest, Mississippi. Final report to National Forests in Mississippi and FS/BLM National Aquatic Center. 40 p. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, Center for Bottomland Hardwoods Research, 1000 Front Street, Oxford, MS.

Haag, Wendell R.; Warren, Melvin L., Jr. 1999. Mantle displays of freshwater mussels elicit attacks from fish. *Freshwater Biology*. 42(1): 35-40.

Haag, Wendell R.; Warren, Melvin L., Jr.; Shillingsford, Mahala. 1999. Host fishes and host-attracting behavior of *Lampsilis altilis* and *Villosa vibex* (Bivalvia: Unionidae). *American Midland Naturalist*. 141: 149-157.

Halverson, N.V.; Wike, L.D.; Patterson, K.K. [and others]. 1997. Wetlands and Carolina Bays of SRS. In: SRS ecology, environmental information document. Aiken, SC: Westinghouse Savannah River Company. 157 p. Chapter 6.

Hamel, Paul B. 1998. Landscape and habitat distribution of the Cerulean warbler, *Dendroica cerulea*, in extensively fragmented Mississippi Alluvial Valley, U.S.A. Presented at 22nd international ornithological congress; 1998 August 16-22; Durban, South Africa. [Poster].

Hamel, Paul B. 1999. Review of Atlas of the breeding birds of Maryland and the District of Columbia by [name of author unknown]. *Journal of Wildlife Management*. 63: 760-761.

Hamel, Paul B.; Brunswig, Norman L.; Dawson, Michael R.; Staten, Mike. 1999. Lying in wait for partners in flight: some experiences monitoring birds in southeastern bottomlands. In: Strategies for bird conservation: the partners in flight planning process, Ithaca, NY: Cornell University Lab of Ornithology: 11 p. [On Web site: <http://www.ornith.cornell.edu/pifcapemay/hamel.htm> and <http://www/ornith.cornell.edu/pifcapemay/twedt.htm>].

Hamel, Paul B.; Buckner, Edward R. 1998. How far could a squirrel travel in the treetops? A prehistory of the southern forest. In: Wadsworth, Kelly G., ed. Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in changing times; 1998 March 20-24 Orlando, FL. Washington, DC: Wildlife Management Institute: 309-315.

Hamel, Paul B.; Woodson, C.A.; Woodrey, M.S. 1999. Winter bird populations on Sharkey site, Yazoo National Wildlife Refuge, Sharkey Co., MS. Presented to the southeast partners in flight symposium: management of migratory landbirds: state of knowledge and research needs; 1999 January 28-30; Biloxi, MS. [Poster].

Henry, Donovan B.; Poly, William J.; Burr, Brooks M.; Warren, Melvin L., Jr. 1999. Habitat and life history aspects of the Federally endangered palezone shiner, *Notropis albizonatus*, in Little South Fork of the Cumberland River, Kentucky. Final report submitted to Kentucky Department of Fish and Wildlife Resources, Frankfort, KY. 65 p. Available from: [unknown].

Johnson, D.W.; Hanson, P.J.; Todd, D.E., Jr. [and others]. 1998. Precipitation change and soil leaching: field results and simulations from Walker Branch Watershed, Tennessee. *Water, Air, and Soil Pollution*. 105: 251-262.

Johnston, Carol E.; Knight, Charles L. 1999. Life-history traits of the bluenose shiner, *Pteronotropis welaka* (Cypriniformes: Cyprinidae). *Copeia*. (1): 200-205.

Johnston, Carol E.; Smithson, Elizabeth B. 1999. Retention of passive integrated transponder (PIT) tags for individual identification of warm-water stream fishes. Proceedings: southeastern fishes council; [Place of meeting unknown]; [Date of meeting unknown]. [Place of publication unknown]: [Publisher unknown]. 38(March): 1-4.

Kilgo, John C.; Miller, Karl V.; Smith, Winston P. 1999. Effects of group-selection timber harvest in bottomland hardwoods on fall migrant birds. *Journal of Field Ornithology*. 70(3): 404-413.

Our Most Important Product: Knowledge

Forested Wetlands, Bottomland Hardwoods, and Streams

- Knowe, Steven A.; Foster, George S., Jr.; Rousseau, Randall J.; Nance, Warren L. 1997. Height-age and height-diameter relationships for monocultures and mixtures of eastern cottonwood clones. *Forest Ecology and Management*. 106: 115-123.
- Kolka, R.K.; Trettin, C.C.; Nelson, E.A. 1997. Development of an assessment framework for restored forested wetlands. In: *Ecosystems restoration creation: formerly the annual conference on wetlands restoration and creation*; 1997 May 15-16; Tampa, FL. [Place of publication unknown]: [Publisher unknown]. [Not paged].
- Kolka, Randall K.; Nelson, Eric A.; Bonar, Ronald E. [and others]. 1998. The Pen Branch project: restoration of a forested wetland in South Carolina. *Restoration Management Notes*. 16(2): 149-151.
- Koshy, M.P.; Namkoong, G.; Roberds, J.H. 1998. Genetic variance in the F2 generation of divergently selected parents. *Theoretical Applied Genetics*. 97: 990-993.
- Leininger, T.D.; Solomon, J.D.; Wilson, A.D.; Schiff, N.M. 1999. A guide to major insects, diseases, air pollution injury, and chemical injury of sycamore. Gen. Tech. Rep. SRS-28. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 44 p.
- Leininger, Theodor D. 1998. Discovering the factors contributing to the decline and mortality of willow oaks in the D'Arbonne National Wildlife Refuge, LA. In: *SOFOR GIS '98: Proceedings of the 2^d southern forestry GIS conference*; 1998 October 28-29; Athens, GA. Athens, GA: The University of Georgia, Center for Continuing Education: 303-312.
- Marion, Daniel A.; Weirich, Frank. 1999. Fine-grained bed patch response to near-bankful flows in a step-pool channel. In: Olsen, Darren S., ed. *AWRA specialty conference: wildland hydrology*; 1999 June 30-July 2; Bozeman, MT. Herndon, VA: American Water Resources Association: 93-100.
- Meier, C.E.; Stanturf, J.A.; Gardiner, E.S. 1999. Litterfall transfers in a mature bottomland hardwood forest. Presented at the Ecological Society of America 84th annual meeting; 1999 August 8-12; Spokane, WA. [Poster].
- Michael, Jerry L.; Webber, E. Cliff, Jr.; Bayne, David R. [and others]. 1999. Hexazinone dissipation in forest ecosystems and impacts on aquatic communities. *Canadian Journal of Forest Research*. 29(7): 1170-1181.
- Michael, Jerry L.; Webber, Elliott C.; Bayne, David R. [and others]. 1998. Environmental fate and aquatic impacts of hexazinone applied at a high rate for planting site preparation. In: Wagner, R.G.; Thompson, D.G., comps. *3rd international conference on forest vegetation management: popular summaries*; 1998 August 24-28; Sault Ste. Marie, Ontario. Sault Ste. Marie, Ontario: Ontario Forest Research Institute. 141: 202-204.
- Moorman, Christopher Elliott. 1999. Relationships between artificially-created gap and breeding birds in a South Carolina bottomland forest. Clemson, SC: Clemson University. 106 p. Ph.D. dissertation.
- Schilling, Erik Brian. 1998. Belowground carbon, nitrogen, and phosphorus dynamics following different harvest intensities on the Pearl River floodplain, Mississippi. Auburn, AL: Auburn University. 113 p. M.S. thesis.
- Schweitzer, Callie Jo. 1998. What is restoring bottomland hardwood forests? A study from the Lower Mississippi Alluvial Valley. In: Wadsworth, Kelly G., ed. *Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in changing times*; 1998 March 20-24; Orlando, FL. Washington, DC: Wildlife Management Institute: 147-i 55.
- Schweitzer, Callie Jo; Gardiner, Emile S.; Stanturf, John A.; Ezell, Andrew W. 1999. Methods to improve establishment and growth of bottomland hardwood artificial regeneration. In: Stringer, Jeffrey W., Loftis, David L., eds. *Proceedings, 12th central hardwood forest conference*; 1999 February 28-March 2; Lexington, KY. Gen. Tech. Rep. SRS-24. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 209-214.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Forested Wetlands, Bottomland Hardwoods, and Streams

Shupe, Todd F.; Hse, Chung Y.; Wang, Wan H. [n.d.]. An investigation of factors affecting wettability of some southern hardwoods. In: Christianse, Alfred W.; Pilato, Louis A., eds. International contributions to wood adhesion research: Proceedings 7267; [Date of meeting unknown]; [Place of meeting unknown]. Madison, WI: Forest Products Society: 132-136.

Smith, Winston P.; Twedt, Daniel J.; Hamel, Paul B. [and others]. 1998. Increasing point-count duration increases standard error. *Journal of Field Ornithology*. 69(3):450-456.

Stanturf, John A.; Schweitzer, Callie J.; Gardiner, Emile S. 1998. Afforestation of marginal agricultural land in the Lower Mississippi River Alluvial Valley, U.S.A. *Silva Fennica*. 32(3): 281-297.

Tainter, F.H.; Leininger, Theodor D.; Williams, Jerry. 1999. Use of the arborsonic decay detector to detect butterfly stain in Chilean tepa. *Interciencia*. 24(3):201-204.

Thien, Leonard B.; Kawano, Shoichi; Azuma, Hiroshi [and others]. 1998. The floral biology of the magnoliaceae. In: Hunt, David, ed. *Magnolias and their allies: Proceedings*; [Date of meeting unknown]; [Place of meeting unknown]. Milbourn Port, U.K.: David Hunt: 39-58.

Trettin, Carl C.; Johnson, Dale W.; Todd, D.E., Jr. 1999. Forest nutrient and carbon pools at Walker Branch Watershed: changes during a 21 -year period. *Soil Science Society of America*. 63(5):1436- 1448.

Twedt, Daniel J.; Hamel, Paul B.; Cooper, Robert J.; Woodrey, Mark S. 1999. An evaluation strategy for conservation goals in the Mississippi Alluvial Valley. In: *Strategies for bird conservation: the partners in flight planning process*. Ithaca, NY: Cornell University Lab of Ornithology. 15 p.

Warren, Melvin L., Jr.; Haag, Wendell R. 1999. Status of the mussel resource in Little South Fork Cumberland River. Final report to Kentucky Department of Fish and Wildlife Resources. 63 p. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, Center for Aquatic Technology Transfer and Center for Bottomlands Hardwood Research, 1000 Front Street, Oxford, MS.

Wilson, A.D.; Lester, D.G. 1998. Application of aromascan analysis to diagnose oak wilt in live oaks. Presented at APS/ESA joint annual meeting; 1998 November 8-12; Las Vegas, NV. [Poster].

Wilson, A.D.; Lester, D.G. 1998. New USDA-FS software for the rapid recognition of oak and cottonwood insect and disease pests. Presented at APS/ESA joint annual meeting; 1998 November 8-12; Las Vegas, NV. [Poster].

Wilson, A.D.; Lester, D.G. 1999. Utilization of aroma scan analysis to identify host species of forest pathogens from woody samples. Presented at 17th annual meeting of the Mississippi association of plant pathologists and nematologists; 1999 February 24; Greenville, MS. [Poster].

Woodson, C.A.; Hamel, C.A.; Broerman, F.J. 1999. Winter raptor populations in fallow fields of the Mississippi Delta, MS. Presented to the southeast partners in flight symposium management of migratory landbirds: state of knowledge and research needs; 1999 January 28-30; Biloxi, MS. [Poster].

Our Most Important Product: Knowledge

The Southern Appalachians

Aldy, Joseph E.; Kramer, Randall A.; Holmes, Thomas P. 1999. Environmental equity and the conservation of unique ecosystems: an analysis of the distribution of benefits for protecting Southern Appalachian spruce-fir forests. *Society & Natural Resources*. 12(2):93-106.

Argent, David G.; Flebbe, Patricia A. 1999. Fine sediment effects on brook trout eggs in laboratory streams. *Fisheries Research*. 39: 253-262.

Bolstad, Paul V.; Swank, Wayne; Vose, James. 1998. Predicting Southern Appalachian overstory vegetation with digital terrain data. *Landscape Ecology*. 13: 271-283.

Bond, Brian H. 1998. Characterization of wood features using color, shape, and density parameters. Blacksburg, VA: Virginia Polytechnic Institute and State University. 160 p. Ph.D. dissertation.

Brose, Patrick H.; Van Lear, David, H.; Keyser, Patrick D. 1998. Regenerating oak stands with prescribed fire: preliminary results of the shelterwood-burn technique. In: Pruden, Teresa L.; Brennan, Leonard A., eds. *Proceedings of the 20th annual Tall Timbers fire ecology conference: fire in ecosystem management: shifting the paradigm from suppression to prescription*; 1996 May 7-10; Boise, ID. Tallahassee, FL: Tall Timbers Research Station: 147-150.

Brose, Patrick; Van Lear, David. 1999. Fire: friend or foe? *Tree Farmer*. May/June: 8-10.

Brose, Patrick; VanLear, David; Cooper, Roderick. 1999. Using shelterwood harvests and prescribed fire to regenerate oak stands on productive upland sites. *Forest Ecology and Management*. 113: 125-141.

Clinton, Barton D.; Vose, James M.; Swank, Wayne T. [and others]. 1998. Fuel consumption and fire characteristics during understory burning in a mixed white pine-hardwood stand in the Southern Appalachians. Res. Pap. SRS-12. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 8 p.

Cordell, H. Ken; Helton, Gerald; Peine, John. 1999. Social scientists had a place at the table: the Southern Appalachian ecoregional assessment. In: Cordell, H. Ken; Bergstrom, John C., eds. *Integrating social sciences with ecosystem management: human dimensions in assessment, policy, and management*. Champaign, IL: Sagamore Publishing: 320-330. Chapter 18.

Dolloff, C. Andrew. 1998. Review of Brook trout—a thorough look at North America's great native trout—its history, biology, and angling possibilities, by Nick Karas. *Fisheries*. 23(10): 54-55.

Elliott, Katherine J.; Hendrick, Ronald L.; Major, Amy E. [and others]. 1999. Vegetation dynamics after a prescribed fire in the Southern Appalachians. *Forest Ecology and Management*. 114: 199-213.

Flebbe, Patricia A. 1999. Trout use of woody debris and habitat in Wine Spring Creek, North Carolina. *Forest Ecology and Management*. 114: 367-376.

Grace, J. McFero, III. 1999. Erosion control techniques on forest road cut slopes and fillslopes in North Alabama. Presented at 7th international conference on low-volume roads; 1999 May 23-26; Baton Rouge, LA. Transp. Res. Rec. 1652. Washington, DC: Transportation Research Board, National Research Council: 227-234. Vol. 2.

Harding, J.S.; Benfield, E.F.; Bolstad, Paul V. [and others]. 1998. Stream biodiversity: the ghost of land use past. *Proceedings of the National Academy of Sciences of the United States of America*. 95: 14,843-14,847.

Huang, Hongwen; Dane, Fenny; Kubisiak, Tom L. 1998. Allozyme and RAPD analysis of the genetic diversity and geographic variation in wild populations of the American chestnut (Fagaceae). *American Journal of Botany*. 85(7): 1013-1021.

Kim, Geneho. 1999. AppBuilder for DSSTOOLS: application development environment for developing decision support systems in DSSTOOLS. Athens, GA: University of Georgia. 125 p. MS. thesis.

Our Most Important Product: Knowledge

The Southern Appalachians

- Kline, D. Earl; Conners, Richard W.; Araman, Philip A. 1998. What's ahead in automated lumber grading. In: ScanPro 1998: 8th international conference on scanning technology and process optimization for the wood products industry; 1998 November 4-6; Vancouver, Canada. San Francisco: Miller Freeman. 12 p.
- Knoepp, Jennifer D.; Tieszen, Larry L.; Fredlund, Glen G. 1998. Assessing the vegetation history of three Southern Appalachian balds through soil organic matter analysis. Res. Pap. SRS-13. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 12 p.
- Kormanik, Paul P. 1998. Effect of acorn size on development of northern red oak 1-0 seedlings. Canadian Journal of Forest Research. 28: 1805-1 813.
- Kormanik, Paul P.; Sung, Shi Jean S. 1998. Effect of seedling size and first-order-lateral roots on early development of northern red oak on mesic sites. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 247-252.
- Kormanik, Paul P.; Sung, Shi-Jean S.; Kormanik, Taryn L. [and others]. 1998. Heritability of first-order-lateral roots in five *Quercus* species: effect on 1-0 seedling quality evaluation. In: Steiner, Kim C., ed. Proceedings of the 2^d meeting of IUFRO working party 2.08.05, genetics of *quercus*; 1997 October 12-17; University Park, PA. University Park, PA: Pennsylvania State University: 194-200.
- Kubisiak, Thomas L. 1999. Science and natural history: using DNA markers to distinguish among chestnut species and hybrids. The Journal of the American Chestnut Foundation. 13(1): 38-42.
- Lee, Andy W.C.; Hse, Chung Y. 1998. Evaluation of cement-excelisior boards made from yellow-poplar and sweetgum. In: Hse, Chung-Yen, ed. Adhesive technology and bonded tropical wood products: Symposium; 1993 May 25-28; Taipei, Taiwan, R.O.C. Taipei, Taiwan: Taiwan Forestry Institute: 565-571.
- Lemly, A. Dennis. 1998. Potential hazard of prescribed burning to aquatic life on southern national forests. Technical assistance report to Region 8 hazardous materials assessment team. 7 p. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, Department of Fisheries and Wildlife Sciences, Room 140, Cheatham Hall, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Lemly, A. Dennis. 1999. Sublethal effects of acidification on fish and macroinvertebrates: indicators for evaluating the status and recovery of acid-stressed aquatic ecosystems. Prepared for the Ecological Society of America workshop on acid deposition; 1999 March 1-3; Washington, DC. 12 p. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, Department of Fisheries and Wildlife, Room 100, Cheatham Hall, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Li, Pei; He, Jing; Abbott, A. Lynn; Schmoltd, Daniel L. 1996. Labeling defects in CT images of hardwood logs with species-dependent and species-independent classifiers. In: Pinz, A. Polzleitner, ed. Proceedings of the IAPR TC-8 workshop: machine perception applications; 1996 September 2-3; Graz, Austria. [Place of publication unknown]: Osterreichische Computer-Gesellschaft: 113-1 26.
- Liu, Shanyin. 1998. Integration of forest decision support systems: search for interoperability. Athens, GA: University of Georgia. 121 p. M.S. thesis.
- Martin, Jonathan G.; Kloeppe, Brian D.; Schaefer, Tara L. [and others]. 1998. Aboveground biomass and nitrogen allocation of 10 deciduous Southern Appalachian tree species. Canadian Journal of Forest Research. 28: 1648-1659.
- McDonald, Tim; Stokes, Bryce. 1998. A forest landscape visualization system. In: Computers in agriculture: 7th international conference; 1998 October 26-30; Orlando, FL. St. Joseph, MI: American Society of Agricultural Engineers: 753-760.

Our Most Important Product: Knowledge

The Southern Appalachians

McDonald, Timothy P. 1998. A system for drawing synthetic images of forested landscapes. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 623-626.

McGee, Charles E. 1998. The effect of oak budbreak patterns on shade tolerance and regeneration. In: Steiner, Kim C., ed. Proceedings: diversity and adaptation in oak species; 1997 October 12-17; University Park, PA. University Park, PA: Pennsylvania State University: 279-287.

McNab, W. Henry; Browning, Sara A.; Simon, Steven A.; Fouts, Penelope E. 1999. An unconventional approach to ecosystem unit classification in western North Carolina. *Forest Ecology and Management*, 114: 405-420.

Mitchell, Hal L. 1999. Predicting pallet part yields from hardwood cants, Blacksburg, VA: Virginia Polytechnic Institute and State University. 159 p. M.S. thesis,

Nute, Donald; Kim, Geneho; Potter, Walter D. [and others]. 1999. A multi-criterial decision support system for forest management. In: Environmental decision support systems and artificial intelligence. WS-99-07. Menlo Park, CA: AAAI Press: 74-81.

Pendleton, Linwood; Sohngen, Brent; Mendelsohn, Robert; Holmes, Thomas. 1998. Measuring environmental quality in the Southern Appalachian Mountains. *Forest Science*. 44(4):603-609.

Potter, W.D.; Somasekar, S.; Kommineni, R.; Rauscher, H.M. 1999. NED-IIS: an intelligent information system for forest ecosystem management. In: Intelligent information systems: 16th national conference on artificial intelligence; 1999 July 18-19; Orlando, FL. Menlo Park, CA: AAAI Press: 50-55.

Rauscher, H. Michael. 1999. Ecosystem management decision support for Federal forests in the United States: a review. *Forest Ecology and Management*. 114: 173-197.

Remaley, Mark Alexander. 1998. Genetic variation in selected acorn and seedling characteristics of northern red oak (*Quercus rubra* L.). Knoxville, TN: University of Tennessee. 184 p. MS. thesis.

Rivers, Christopher Todd. 1999. Community composition in canopy gaps as influenced by *Rhododendron maximum*. Clemson, SC: Clemson University. 77 p. M.S. thesis.

Schmoldt, Daniel L. 1998. Knowledge acquisition using linguistic-based knowledge analysis. *AI Applications*. 12(1-3):1-20.

Schmoldt, Daniel L. 1998. Obstacles to industrial implementation of scanning systems, In: Lindgren, Owe; Gronlund, Anders; Hogman, Olle, eds. Technical report: Proceedings from the 3rd international seminar/workshop on scanning technology and image processing on wood; 1998 August 17-19; Skelleftea, Sweden. Skelleftea, Sweden: Lulea University of Technology: 151-154.

Schmoldt, Daniel L.; He, Jing; Abbott, A. Lynn. 1998. Classifying features in CT imagery: accuracy for some single- and multiple-species classifiers. In: Lindgren, Owe; Gronlund, Anders; Hagman, Olle, eds. Technical report: Proceedings from the 3rd international seminar/workshop on scanning technology and image processing on wood; 1998 August 17-19; Skelleftea, Sweden. Skelleftea, Sweden: Lulea University of Technology. 27: 19-30.

Simons, Theodore R.; Rabenold, Kerry N.; Buehler, David A. [and others]. 1999. The role of indicator species: neotropical migratory song birds. In: Peine, John D., ed. Ecosystem management for sustainability: principles and practices illustrated by a regional biosphere reserve cooperative. [Place of publication unknown]: CRC Press: 187-208.

Sung, Shi-Jean S.; Kormanik, Paul P.; Zarnoch, Stanley J. 1998. Photosynthesis and biomass allocation in oak seedlings grown under shade. In: Waldrop, Thomas A., ed. Proceedings of the ninth biennial southern silvicultural research conference; 1997 February 25-27; Clemson, SC. Gen. Tech. Rep. SRS-20. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 227-233.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

The Southern Appalachians

Swift, Lloyd W., Jr.; Burns, Richard G. 1999. The three Rs of roads: redesign, reconstruction, restoration. *Journal of Forestry*. 97(8): 40-44.

Taylor, Steven E.; Rummer, Robert B.; Yoo, Kyung H. [and others]. 1999. What we know-and don't know-about water quality at stream crossings. *Journal of Forestry*. 97(8): 12-17.

Tilley, David Rogers. 1999. Energy basis of forest systems. Gainesville, FL: University of Florida. 296 p. Ph.D. dissertation.

Ulrey, Christopher J. 1998. Comparison of detrended correspondence analysis and nonmetric multidimensional scaling ordination techniques using vegetation data from the Southern Appalachians. Raleigh, NC: North Carolina State University. 91 p. MS. thesis.

Vose, James M.; Swank, Wayne T.; Clinton, Barton D. [and others]. 1999. Using stand replacement fires to restore Southern Appalachian pine-hardwood ecosystems: effects on mass, carbon, and nutrient pools. *Forest Ecology and Management*. 114: 215-226.

Waldrop, Thomas A.; Brose, Patrick H. 1999. A comparison of fire intensity levels for stand replacement of Table Mountain pine (*Pinus pungens* Lamb.). *Forest Ecology and Management*. 113: 155-166.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Interior Highlands

Cain, Michael D.; Shelton, Michael G. 1998. Viability of litter-stored *Quercus falcata* Michx. acorns after simulated prescribed winter burns. *International Journal of Wildland Fire*. 8(4): 199-203.

Cain, Michael D.; Wigley, T. Bentley; Reed, Derik J. 1998. Prescribed fire effects on structure in uneven-aged stands of loblolly and shortleaf pines. *Wildlife Society Bulletin*. 26(2): 209-218.

Dickson, R.E.; Coleman, Mark D.; Riemenschneider, D.E. [and others]. 1999. Growth of five hybrid poplar genotypes exposed to interacting elevated CO₂ and O₃. *Canadian Journal of Forest Research*. 28: 1706-1716.

Kluender, Richard; Stokes, Bryce. 1999. The effect of removal intensity and tree size on harvesting cost and profitability [Brochure]. In: APA Technical Release 99-R-3. Rockville, MD: American Pulpwood Association. 2 p.

Lonzarich, David George; Warren, Melvin L., Jr.; Lonzarich, Mary Ruth Elger. 1998. Effects of habitat isolation on the recovery of fish assemblages in experimentally defaunated stream pools in Arkansas. *Canadian Journal of Fisheries and Aquatic Sciences*. 55: 2141-2149.

Miller, Darren A.; Leopold, Bruce D.; Conner, L. Mike; Shelton, Michael G. 1999. Effects of pine and hardwood basal areas after uneven-aged silvicultural treatments on wildlife habitat. *Southern Journal of Applied Forestry*. 23(3): 151-157.

Nkouka, J. 1999. Evaluation of the effect of thinning levels, site index, and age on shortleaf pine (*Pinus echinata* Mill.) regeneration and hardwood understory. Stillwater, OK: Oklahoma State University. 76 p. MS. thesis.

Peitz, David G.; Tappe, Philip A.; Shelton, Michael G.; Sams, Michael G. 1999. Deer browse response to pine-hardwood thinning regimes in southeastern Arkansas. *Southern Journal of Applied Forestry*. 23(1): 16-20.

Rodewald, Paul G.; Smith, Kimberly G. 1998. Short-term effects of understory and overstory management on breeding birds in Arkansas oak-hickory forests. *Journal of Wildlife Management*. 62(4): 1411-1417.

Rose, Charles Edward, Jr. 1998. Parameter estimation for a shortleaf pine (*Pinus echinata* Mill.) basal area growth model. Stillwater, OK: Oklahoma State University. 100 p. MS. thesis.

Rudis, Victor A.; Thill, Ronald A.; Gramann, James H. [and others]. 1999. Understory structure by season following uneven-aged reproduction cutting: a comparison of selected measures 2 and 6 years after treatment. *Forest Ecology and Management*. 114: 309-320.

Shelton, Michael G.; Cain, Michael D. 1999. Structure and short-term dynamics of the tree component of a mature pine-oak forest in southeastern Arkansas. *Journal of the Torrey Botanical Society*. 126(1): 32-48.

Spetich, Martin A.; Graney, David L.; Murphy, Paul A. 1999. Residual stand quality following implementation of uneven-aged silviculture in even-aged oak-hickory forests in the Boston Mountains of Arkansas. In: Stringer, Jeffrey W.; Loftis, David L., eds. *Proceedings, 12th central hardwood forest conference; 1999 February 28-March 1-2; Lexington, KY. Gen. Tech. Rep. SRS-24. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 221-227.*

Taulman, James E; Smith, Kimberly G.; Thill, Ronald E. 1998. Demographic and behavioral responses of southern flying squirrels to experimental logging in Arkansas. *Ecological Applications*. 8(4): 1144-1155.

Our Most Important Product: Knowledge

Large Scale Assessment and Modeling

Aber, John D.; McDowell, William; Nadelhoffer, **Knute** [and others]. 1998. Nitrogen saturation in temperate forest ecosystems. *Bioscience*. 48(11): 921-934

Abt, Robert C.; Cabbage, Frederick W.; Lee, Karen J.; Munn, Ian. 1998. Timber supply: Mississippi and the South. *Tree Talk*. Winter: 15-20.

Alig, Ralph J.; **Dicks**, Michael R.; Moulton, Robert J. 1999. Land use dynamics involving forestland: trends in the U.S. South. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 9-15.

Aruna, **P.B.**; Mercer, Evan. 1999. The timber economy of the mid-Atlantic region: some preliminary results from the mid-Atlantic integrated assessment. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 172-179.

Carter, Douglas R. 1999. Structural change in southern softwood stumpage markets. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 112-117.

Hargrove, W.H.; Luxmoore, R.J. 1998. A new high-resolution national map of vegetation ecoregions produced empirically using multivariate spatial clustering. Redlands, CA: Environmental Systems Research Institute, Inc. [Number of pages unknown]. [CDROM and Web address: www.esri.com/library/userconf/proc98/PROCEED/TO350/PAP333/P333.HTM]

Huntington, T.G.; Harden, J.W.; Dabney, **S.M.** [and others]. 1998. Soil, environmental, and watershed measurements in support of carbon cycling studies in northwestern Mississippi. Open-File Rep. 98-501. Atlanta: U.S. Geologic Survey. 91 p.

Laarman, Jan; Gregersen, Hans. 1994. Making nature-based tourism contribute to sustainable development. Policy Brief 5. The Environmental and Natural Resources Policy and Training Project. 6 p. Available from: EPAT/Mucia, University of Wisconsin, 610 Walnut Street, Madison, WI.

McNulty, Steven G. 1998. Forests. *Acclimations*. Newsletter of the U.S. National Assessment of Climate Variability and Change. 0(3): 4.

McNulty, Steven G.; Sun, Ge. 1998. The development and use of best practices in forest watersheds using GIS and simulation models. In: Proceedings of the international symposium on comprehensive watershed management; 1998 September 7-10; Beijing, China. Beijing, China: International Research and Training Center on Erosion and Sedimentation (IRTCES): 391-398.

Mercer, Evan; Thompson, **Alton**; Fleming, **George**. 1999. Economic demand for ecotourism development. In: Ecotourism in the Blue and John Crow Mountains National Park of Jamaica, West Indies. The Res. Tech. Bull. Ser. T-1 41. Greensboro, NC: North Carolina A&T State University, School of Agriculture: 53-74. Chapter 3.

Munn, Ian A.; Cleaves, David. 1999. An analysis of losses to the southern commercial timberland base. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 198-202.

Panton, Charles A.; Gayle, Godfrey; Raczkowski, Charles. 1999. Biophysical assessment. In: Ecotourism in the Blue and John Crow Mountains National Park of Jamaica, West Indies. The Res. Tech. Bull. Ser. T-1 41. Greensboro, NC: North Carolina A&T State University, School of Agriculture: 8-31. Chapter 2.

Prestemon, Jeffrey P.; Wear, David N. 1999. Inventory effects on aggregate timber supply. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 26-32.

Our Most Important Product: Knowledge

Large Scale Assessment and Modeling

Spetich, Martin A.; Parker, George R. 1998. Plot size recommendations for biomass estimation in Midwestern old-growth forest. *Journal of Applied Forestry*. 15(4): 165-168.

Spetich, Martin A.; Shifley, Stephen R.; Parker, George R. 1999. Regional distribution and dynamics of coarse woody debris in Midwestern old-growth forests. *Forest Science*. 45(2): 302-313.

Sun, Ge; McNulty, Steven G. 1998. Modeling soil erosion and transport on forest landscape. In: *Proceedings of conference 29; 1998 February 16-20; Reno, NV. Steamboat Springs, CO: International Erosion Control Association: 189-198.*

Teeter, Lawrence; Zhou, Xiaoping. 1999. A multinomial logit approach to estimating regional inventories by product class. In: Abt, Karen Lee; Abt, Robert C., eds. *SOFEW '98: Proceedings of the 1998 southern forest economics workshop: part II; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 238-242.*

Teeter, Lawrence; Zhou, Xiaoping. 1999. Projecting timber inventory at the product level. *Forest Science*. 45(2): 226-231.

Thompson, Alton; Mercer, Evan; Alston, Antoine. 1999. Planning for ecotourism in communities surrounding the B&JCM National Park. In: *Ecotourism in the Blue and John Crow Mountains National Park of Jamaica, West Indies. The Res. Tech. Bull. Ser. T-1 41. Greensboro, NC: North Carolina A&T State University, School of Agriculture: 34-52.*

Wear, David N. 1999. Challenges to interdisciplinary discourse. *Ecosystems*. 2(4): 299-301.

Wear, David N.; Bolstad, Paul. 1998. Land-use changes in Southern Appalachian landscapes: spatial analysis and forecast evaluation. *Ecosystems*, 1: 575-594.

Wear, David N.; Liu, Rei; Foreman, J. Michael; Sheffield, Raymond M. 1999. The effects of population growth on timber management and inventories in Virginia. *Forest Ecology and Management*. 118: 107-115.

Woodbury, Peter B.; Smith, James E.; Weinstein, David A.; Laurence, John A. 1998. Assessing potential climate change effects on loblolly pine growth: a probabilistic regional modeling approach. *Forest Ecology and Management*. 107: 99-116.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Inventory and Monitoring

Bechtold, W.A.; Zarnoch, S.J.; Burkman, W.G. 1998. Comparisons of modeled height predictions to ocular height estimates. *Southern Journal of Applied Forestry*. 22(4): 216-221.

Birch, Thomas W.; Hodge, Sandra S.; Thompson, Michael T. 1998. Characterizing Virginia's private forest owners and their forest lands. Res. Pap. NE-707. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 10 p.

Boyle, Kevin J.; Teisl, Mario F. 1999. Public preferences for timber harvesting on private forest land purchased for public ownership in Maine. In: *Maine Agric. and For. Exp. Stn. Misc. Rep. 414*. Orono, ME: University of Maine, Department of Resource Economics and Policy. 18 p.

Casey, James F.; Mercer, D. Evan; Snook, Ann. 1999. Evaluating farmer preferences for agroforestry systems: survey instrument design. In: Abt, Karen Lee; Abt, Robert C., eds. *SOFEW '98: Proceedings of the 1998 southern forest economics workshop*; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 153-158.

Clark, Neil; Wynne, Randolph H.; Schmoldt Daniel L. [and others]. 1998. Use of a non-metric digital camera for tree stem evaluation. In: *Technical papers: ASPRS-RTI: 1998 annual conference*; 1998 March 30-April 3; Tampa, FL. Bethesda, MD: American Society for Photogrammetry and Remote Sensing. 13 p.

Cost, Noel D. 1999. A new annual forest inventory system for the South. *Forest Landowner*, 58(2): 16-19.

Cabbage, Frederick; Siry, Jacek; Abt, Robert C. [and others]. 1999. Forest productivity and timber supply modeling in the South. In: Ek, Alan R.; ZumBahlen, Bruce, comps. *Proceedings: improving forest productivity for timber.. a key to sustainability*; 1998 December 1-3; Duluth, MN. St. Paul, MN: University of Minnesota, Department of Forest Resources: 285-290.

Cabbage, Frederick; Siry, Jacek; Moffat, Steverson [and others]. 1998. Southern forest resource assessment and linkages to the national RPA. In: *Proceedings of the Society of American Foresters 1998 national convention*; 1998 September 19-23; Traverse City, MI. Bethesda, MD: Society of American Foresters: 344-349.

Hartsell, Andrew J. 1999. Financial returns on timberlands in Mississippi between 1977 and 1994. Starkville, MS: Mississippi State. 85 p. M.S. thesis.

Howell, Michael; Ford, Eric. 1999. Florida's timber industry-an assessment of timber product output and use, 1997. *Resour. Bull. SRS-43*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 32 p.

Johnson, Tony G.; Brown, David R. 1999. North Carolina's timber industry-an assessment of timber product output and use, 1997. *Resour. Bull. SRS-39*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 34 p.

Johnson, Tony G.; Steppleton, Carolyn D. 1999. Southern pulpwood production, 1997. *Resour. Bull. SRS-37*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 37 p.

Johnson, Tony G.; Wells, John L. 1999. Georgia's timber industry-an assessment of timber product output and use, 1997. *Resour. Bull. SRS-38*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 36 p.

Miller, Dan; MacLauchlan, Lorraine. 1998. Assessment of forest insect conditions at OPAX Mountain silviculture trial. In: Vyse, Alan; Hollstedt, Chris; Huggard, David, eds. *Managing the dry Douglas-fir forests of the southern interior: workshop proceedings*; 1977 April 29-30; Kamloops, BC. [Place of publication unknown]: Ministry of Forest Research Program: 161-t 85.

Moulton, Robert J. 1999. Forestry in U.S. climate change action plans: from the Arch to Kyoto. In: Abt, Karen Lee; Abt, Robert C., eds. *SOFEW '98: Proceedings of the 1998 southern forest economics workshop*; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 204-207.

Our Most Important Product: Knowledge

Inventory and Monitoring

Moulton, Robert J. 1999. Tree planting in the United States-1997. *Tree Planters' Notes*. 49(1): 5-15.

Reams, Gregory A.; Van Deusen, Paul C. 1999. The southern annual forest inventory system. *Journal of Agricultural, Biological, and Environmental Statistics*. 4(3): 108-122.

Rosson, James Forrest, Jr. 1999. An analysis of the temporal dynamics in tree species diversity for major tree taxa of two States in the Midsouth, U.S.A. Knoxville, TN: University of Tennessee. 226 p. Ph.D. dissertation.

Roudik, **Ronen**. 1998. An investigation of user perceptions of repaired wood pallets. Blacksburg, VA: Virginia Polytechnic Institute and State University. 79 p. M.S. thesis.

Rudis, Victor A. 1998. Regional forest resource assessment in an ecological framework: the Southern United States. *Natural Areas Journal*. 18(4): 319-332.

Scarpa, Riccardo; Buongiorno, Joseph; Lee, Karen. 1999. Determinants of non-timber values in Wisconsin northern hardwoods. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW'98: Proceedings of the 1998 southern forest economics workshop: part II; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 228-232.

Schaberg, Rex H.; Holmes, Thomas P.; Lee, Karen J.; Abt, Robert C. 1999. Ascribing value to ecological processes: an economic view of environmental change. *Forest Ecology and Management*. 114: 329-338.

Schweitzer, **Callie** Jo. 1997. Forest statistics for west Tennessee, 1997. *Resour. Bull. SRS-41*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 60 p.

Schweitzer, **Callie** Jo. 1999. Forest statistics for west-central Tennessee, 1997. *Resour. Bull. SRS-44*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 52 p.

Sheffield, Raymond M. 1999. Southern U.S. forest trends [Brochure]. Tech. Release 99-R-7. Rockville, MD: American Pulpwood Association. 2 p.

Sheffield, Raymond M.; Dickson, James Ci. 1998. The South's forestland-on the hot seat to provide more. In: Wadsworth, Kelly G., ed. Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in challenging times; 1998 March 20-24; Orlando, FL. Washington, DC: Wildlife Management Institute. 63: 316-331.

Steinman, Jim. 1999. Changes in composition of the mixed mesophytic forest: effects of succession and disturbance. NA-TP-04-99. Morgantown, WV: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 40 p.

Stoke, Kenneth W. 1998. Vegetation structure indicator, [Place of publication unknown]: [Publisher unknown]. [Number of pages unknown].

Stratton, Daniel; **Lowe**, Larry. 1999. Kentucky's timber industry-an assessment of timber product output and use, 1997. *Resour. Bull. SRS-40*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 40 p.

Stratton, Daniel; **Wright**, Robert C. 1999. Tennessee's timber industry-an assessment of timber product output and use, 1997. *Resour. Bull. SRS-42*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 36 p.

Thompson, Michael T. 1998. Forest statistics for Georgia, 1997. *Resour. Bull. SRS-36*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 92 p.

Thompson, Michael T. 1998. Forest statistics for north Georgia, 1998. *Resour. Bull. SRS-35*. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 59 p.

Thompson, Michael T. 1999. A forested tract-size profile of Florida's NIPF landowners. Res. Pap. SRS-15. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 10 p.

Our Most Important Product: Knowledge

Foundation Programs

Achtemeier, Gary L.; Jackson, William; Hawkins, Bernie [and others]. 1998. The smoke dilemma: a head-on collision! In: Wadsworth, Kelly G., ed. Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in challenging times; 1998 March 20-24; Orlando, FL. Washington, DC: Wildlife Management Institute. 63: 415-421.

Adams, Janey C. 1998. The role of leaf litter and small wood in the retention of fine particles during storms in an Appalachian headwater stream. Blacksburg, VA: Virginia Polytechnic Institute and State University. 96 p. M.S. thesis.

Allan, C.J.; Heyes, A. 1998. A preliminary assessment of wet deposition and episodic transport of total and methyl mercury from low order Blue Ridge watersheds, S.E. U.S.A. Water, Air, and Soil Pollution. 105: 573-592.

Alston, Antoine J. 1998. Effective community development: involving local residents in planning ecotourism in selected mountain communities of Jamaica. Greensboro, NC: North Carolina A&T State University. 93 p. M.S. thesis.

Araman, Philip A.; Bush, Robert J.; Hager, E. Bradley; Hammett, A.L. 1999. Landfills potential source for cores: computer model analyzes landfills for on-site recycling operations. Pallet Enterprise. 19(2): 20-24.

Araman, Philip A.; Bush, Robert J.; Hammett, A.L.; Hager, E. Bradley. 1998. Wood pallets and landfills status and opportunities for economic recovery and recycling. In: Proceedings: WASTECON 1998: global opportunities for efficiency and reliability in solid waste management: SWANA'S 36th annual international solid waste exposition; 1998 October 26-29; Charlotte, NC. Silver Spring, MD: Solid Waste Association of North America: 345358.

Araman, Philip A.; Hager, E. Bradley; Hammett, A.L. 1998. Bridging the gap between research and application-business plan spreadsheets are helping wood recovery efforts. In: Johnson, James E., ed. Extension working party S6.06-03: Proceedings of a symposium: extension forestry: bridging the gap between research and application; 1998 July 19-24; Blacksburg, VA. Blacksburg, VA: Virginia Polytechnic Institute and State University, College of Forestry and Wildlife Resources: 3-12.

Argo, Barry Wayne. 1998. Macroclimate and microclimate effects on flowering phenology and habitat distribution of *Caulophyllum* (Berberidaceae) in the Southern Appalachian Mountains. Athens, GA: University of Georgia. 78 p. MS. thesis.

Bailey, Philip D. 1999. The impact of Federal and State income taxes on forest landowners: an examination of tax liabilities and tax planning. [Place of publication unknown]: Virginia Polytechnic Institute and State University. 143 p. Ph.D. dissertation,

Baker, Terrell T.; Van Lear, David H. 1998. Relations between density of rhododendron thickets and diversity of riparian forests. Forest Ecology and Management. 109: 21-32.

Barlow, Stephen A.; Munn, Ian A.; Cleaves, David A.; Evans, David L. 1998. The effect of urban sprawl on timber harvesting: a look at two Southern States. Journal of Forestry. 96(12): 10-14.

Barnhart, Heather Diane. 1998. Factors influencing perceived effectiveness of the St. Tammany Parish, Louisiana, timber-harvesting permit and support for similar, local legislation. Baton Rouge, LA: Louisiana State University and Agricultural and Mechanical College. 162 p. M.S. thesis.

Bennett, Barbara Loraine. 1998. Land use influences on benthic invertebrate assemblages in Southern Appalachian agricultural streams, Blacksburg, VA: Virginia Polytechnic Institute and State University. 96 p. M.S. thesis,

Berg, Erik C. 1997. Bent Creek demonstration program. In: Communicating the role of silviculture in managing the national forests: Proceedings of the national silviculture workshop; 1997 May 19-22; Gen. Tech. Rep. NE-238. Warren, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experimental Station: 153-154.

Our Most Important Product: Knowledge

Foundation Programs

Berke, B.; Tobiason, FL.; Hatano, T. [and others]. 1999. Interactions of flavanoids with bradykinin in aqueous solution. In: Cheze, C.; Vercauteren, J., eds. Polyphenols, wine, and health communications symposium; 1999 April 14-16; Bordeaux, France. Bordeaux, France: Universite Victor Segalen, Laboratoire de Pharmacognosie: 55-56.

Betz, Carter J.; English, Donald B.K.; Cordell, H. Ken. 1999. Outdoor recreation resources. In: Cordell, H. Ken, comp., ed. Outdoor recreation in American life: a national assessment of demand and supply trends. Champaign, IL: Sagamore Publishing: 40-182. Chapter 3.

Bianco, Riccardo Lo; Rieger, Mark; Sung, Shi Jean S. 1998. A simple, rapid extraction and assay procedure for NAD + -dependent sorbitol dehydrogenase (SDH) in peach. *Journal of the American Horticultural Society*. 123(6): 1065-1068.

Bianco, Riccardo Lo; Rieger, Mark; Sung, Shi-Jean S. 1998. Carbohydrate metabolism of vegetative and reproductive sinks in the late-maturing peach cultivar "Encore." *Tree Physiology*. 19: 103-109.

Bolstad, Paul V.; Swift, Lloyd W., Jr.; Collins, Fred; Regniere, Jacques. 1998. Measured and predicted air temperatures at basin to regional scales in the Southern Appalachian Mountains. *Agricultural and Forest Meteorology*. 91: 161-176.

Boltz, Frederick; Holmes, Thomas P.; Carter, Douglas R. 1999. The economics of reduced impact logging in the American tropics: a review of recent initiatives. In: Abt, Karen Lee; Abt, Robert C., eds. SOFEW'98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA. Raleigh, NC: North Carolina State University, Department of Forestry: 145-i-51.

Bowker, J.M.; English, Donald B.K.; Cordell, H. Ken. 1999. Projections of outdoor recreation participation to 2050. In: Cordell, H. Ken, comp., ed. Outdoor recreation in American life: a national assessment of demand and supply trends. Champaign, IL: Sagamore Publishing: 324-350. Chapter 6.

Bowne, David R. 1997. Rat tales and landscape lessons: the effects of landscape spatial structure on movement patterns of *Sigmodon hispidus* (Hispid cotton rats). Athens, GA: University of Georgia. 56 p. M.S. thesis.

Bowne, David R.; Peles, John D.; Barrett, Gary W. 1999. Effects of landscape spatial structure on movement patterns of the hispid cotton rat (*Sigmodon hispidus*). *Landscape Ecology*. 14: 53-65.

Carter, Douglas R.; Newman, David H. 1998. The impact of reserve prices in sealed bid Federal timber sale auctions. *Forest Science*. 44(4): 485-495.

Clark, James S.; Macklin, Eric; Wood, Leslie. 1998. Stages and spatial scales of recruitment limitation in Southern Appalachian forests. *Ecological Monographs*. 68(2): 213-235.

Clark, Neil A. 1998. An assessment of the utility of a non-metric digital camera for measuring standing trees. Blacksburg, VA: Virginia Polytechnic Institute and State University. 119 p. M.S. thesis.

Clinton, Barton D.; Vose, James M. 1999. Fine root respiration in mature eastern white pine (*Pinus strobus*) in situ: the importance of CO₂ in controlled environments. *Tree Physiology*. 19: 475-479.

Coleman, Mark D.; Dickson, R.E.; Isebrands, J.G. 1999. Growth and physiology of aspen supplied with different fertilizer addition rates. *Physiologia Plantarum*. 103: 13.

Cordell, H. Ken. 1999. Framework for the assessment. In: Cordell, H. Ken, comp., ed. Outdoor recreation in American life: a national assessment of demand and supply trends. Champaign, IL: Sagamore Publishing: 31-38. Chapter 2.

Cordell, H. Ken; Hoover, Anne P.; Super, Gregory R.; Manning, Cynthia H. 1999. Adding human dimensions to ecosystem-based management of natural resources. In: Cordell, H. Ken; Bergstrom, John C., eds. Integrating social sciences with ecosystem management. Champaign, IL: Sagamore Publishing: 1-12. Chapter 1.

Our Most Important Product: Knowledge

Foundation Programs

Cordell, H. Ken; McDonald, Barbara L.; Teasley, R. Jeff [and others]. 1999. Outdoor recreation participation trends. In: Cordell, H. Ken, comp., ed. *Outdoor recreation in American life: a national assessment of demand and supply trends*. Champaign, IL: Sagamore Publishing: 219-319. Chapter 5.

Cordell, H. Ken; Thompson, Howie; McDonald, Barbara L. [and others]. 1999. Shifting values and public expectations: management perspectives. In: Johnson, N.C., comp., ed. *Ecological stewardship: a common reference for ecosystem management*. New York: Elsevier Science: 59-84.

Cordell, Harold K.; Bliss, John C.; Johnson, Cassandra Y.; Fly, Mark. 1998. Voices from southern forests. In: Wadsworth, Kelly G., ed. *Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in challenging times; 1998 March 20-24; Orlando, FL*. Washington, DC: Wildlife Management Institute: 332-347.

Cordell, Harold K.; Tarrant, Michael A.; McDonald, Barbara L.; Bergstrom, John C. 1998. How the public views wilderness. *International Journal of Wilderness*. 4(3): 28-31.

Courant, Paul N.; Niemi, Ernie; Whitelaw, W. Ed. 1997. The ecosystem-economy relationship: insights from six forested LTER sites. Report to the National Science Foundation. Grant DEB-941 6809. 89 p.

Courtney, Gregory W. 1998. A method for rearing pupae of net-winged midges (Diptera: Blephariceridae) and other torrenticolous flies. *Proceedings of the Entomological Society of Washington*; [Date of meeting unknown]; [Place of meeting unknown]. [Place of publication unknown]: [Publisher unknown]. 100(4): 742-745.

Covington, Wallace; Niering, William A.; Starkey, Ed; Walker, Joan L. 1999. Ecosystem restoration and management: scientific principles and concepts. In: Johnson, N.C., comp., ed. *Ecological stewardship: a common reference for ecosystem management*. Oxford, England: Elsevier Scientific Ltd.: 599-617.

Cowling, Ellis B.; Kelman, Arthur; Powers, Harry R., Jr. 1998. *George Henry Hepting: 1907-1988: a biographical memoir*. Washington, DC: The National Academy Press. 18 p. Vol. 76.

Cushing, Tamara. 1999. Effects of the Federal estate tax on nonindustrial private landowners in Mississippi. {Place of publication unknown}: Mississippi State University. 49 p. MS. thesis.

Cushing, Tamara; Bullard, Steven H.; Greene, John L.; Beauvais, Ted. 1999. The effects of the Federal estate tax on nonindustrial private landowners. In: *Proceedings of the 1998 Society of American Foresters national convention: Great Lakes, great forest; 1998 September 19-23; Traverse City, MI. SAF-99-01*. Bethesda, MD: Society of American Foresters: 270-274.

deSteiguer, J.E. 1998. Senator Craig's Public Lands Management Improvement Act of 1997. *Journal of Forestry*. 96(9): 7-10.

Devall, Margaret S.; Van Deusen, Paul C.; Reams, Gregory A. 1999. Defining old growth in the Southeast: example of cypress. In: Miller, Gary L., ed. *The value of old-growth forest ecosystems of the Eastern United States: conference proceedings; 1993 August 26-28; Asheville, NC*. Asheville, NC: The University of North Carolina: 81-85.

Dobbs, Marion McNamara. 1998. Dynamics of the evergreen understory at Coweeta Hydrologic Laboratory, North Carolina. Athens, GA: University of Georgia. 179 p. Ph.D. dissertation.

Donoghue, Ellen Mary. 1999. Community support organizations and community-based forest management in the Philippines. Raleigh, NC: North Carolina State University. 209 p. Ph.D. dissertation.

Driver, B.L.; Douglass, Robert W.; Loomis, John B. 1999. Outdoor recreation and wilderness in America: benefits and history. In: Cordell, H. Ken, comp., ed. *Outdoor recreation in American life: a national assessment of demand and supply trends*. Champaign, IL: Sagamore Publishing. [Number of pages unknown]. Chapter 1.

Our Most Important Product: Knowledge

Foundation Programs

Elliott, Katherine J.; Boring, Lindsay R.; Swank, Wayne T. 1998. Changes in vegetation structure and diversity after grass-to-forest succession in a Southern Appalachian watershed. *The American Midland Naturalist*. 140: 219-232.

English, Donald B.K. 1997. Effects of sample selection on estimates of economic impacts of outdoor recreation. *The Review of Regional Studies*. 27(3):219-236.

English, Donald B.K.; Cordell, H. Ken; Bowker, James M. 1999. Implications of this assessment. In: Cordell, H. Ken, comp., ed. *Outdoor recreation in American life: a national assessment of demand and supply trends*. Champaign, IL: Sagamore Publishing: 433-440. Chapter 10.

English, Donald B.K.; Crane, Elizabeth. 1999. An analysis of the Forest Service's rural community assistance program in the southern region, R8-TP 32. Atlanta: U.S. Department of Agriculture, Forest Service, Southern Region, 13 p.

English, Donald B.K.; Horne, Amy. 1996. Estimating recreation visitation response to forest management alternatives in the Columbia River Basin. *Journal of Applied Recreation Research*. 21(4):313-334.

Essex, Lou D., Jr. 1998. Resettlement and community development in skyline farms, Jackson County, Alabama. [Place of publication unknown]: Alabama Agricultural and Mechanical University. 46 p. M.S. thesis,

Feng, Z.; Hartel, PG.; Roncadori, R.W.; Sung, S.J.S. 1999. Inhibition of fungal colonization on the rhizoplane of the CS₂-producing plant, *Mimosa pudica* L. In: Box, James E., Jr., ed. *Root demographics and their efficiencies in sustainable agriculture, grasslands, and forest ecosystems: Proceedings of the 5th symposium of the international society of root research; 1996 July 14-18; Clemson, SC. Dordrecht, The Netherlands: Kluwer Academic Publishers: 115-126.*

Fenn, Mark E.; Poth, Mark A.; Aber, John D. [and others]. 1998. Nitrogen excess in North American ecosystems predisposing factors, ecosystem responses, and management strategies. *Ecological Applications*. 8(3):706-733.

Flick, Warren A. 1998. Forest policy perspectives: catch-22 and property rights. *Alabama Forests*. 42(4):16-19.

Ford, William M.; Menzel, Michael A.; McGill, David W. [and others]. 1999. Effects of community restoration fire on small mammals and herpetofauna in the Southern Appalachians. *Forest Ecology and Management*. 114: 233-243.

Garbelotto, Matteo M.; Cobb, Fields W.; Burns, T.D. [and others]. 1999. Genetic structure of *Heterbasidion annosum* in white fir mortality centers in California. *Phytopathology*. 89(7): 546-554.

Gentle, Paul; Bergstrom, John; Cordell, Ken; Teasley, Jeff. 1999. Private landowner attitudes concerning public access for outdoor recreation: cultural and political factors in the United States. *Journal of Hospitality & Leisure Marketing*. 6(1):47-65.

Goelz, J.C.G.; Burk, Thomas E.; Zedaker, Shepard M. 1999. Long-term growth trends of red spruce and Fraser fir at Mt. Rogers, Virginia, and Mt. Mitchell, North Carolina 1999. *Forest Ecology and Management*. 115: 49-59.

Goheen, Donald J.; Orosina, William J. 1998. Characteristics and consequences of root diseases in forests of western North America. Version 3.0. In: Frankel, Susan J., tech. coord. *User's guide to the western root disease model*. Gen. Tech. Rep. PSW-GTR-165. Albany, CA: US. Department of Agriculture, Forest Service, Pacific Southwest Research Station: 3-8.

Greenberg, Cathryn H. 1999. Stemming the tide of invaders. Review of book "Strangers in Paradise." (1997. Washington, DC: Island Press. 467 p.) *Biodiversity Letters*, 4: 152-1 53.

Greene, John L.; Haines, Terry K. 1999. Tapping into forest management assistance programs. In: *Proceedings of the Society of American Foresters 1998 national convention; 1998 September 19-23; Traverse City, MI. Bethesda, MD: Society of American Foresters: 136-141.*

Greene, John. 1998. Understanding loss deductions for yard trees. *The Consultant*. 43(4): 13.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Foundation Programs

Greene, John; Jacobson, Michael. 1998. Understanding loss deductions for timber. *The Consultant*. 43(4): 12-13.

Greenlaw, Jon S.; Shackelford, Clifford E.; Brown, Raymond E. 1998. Call mimicry by eastern towhees and its significance in relation to auditory learning. *Wilson Bulletin*. 110(3): 431-434.

Groom, L.H. 1995. Effect of moisture cycling on mechanical response of metal-plate connector joints with and without an adhesive interface. Res. Pap. SO-291. New Orleans: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 27 p.

Grossman, G.D.; Ratajczak, R.E., Jr. 1998. Long-term patterns of microhabitat use by fish in a Southern Appalachian stream from 1983 to 1992: effects of hydrologic period, season, and fish length. *Ecology of Freshwater Fish*. 7: 108-131.

Guldin, James M.; Wigley, T. Bentley. 1998. Intensive management-can the South really live without it? In: Wadsworth, Kelly G., ed. Transactions of the 63rd North American wildlife and natural resources conference; 1998 March 20-25; Orlando, FL. Washington, DC: Wildlife Management Institute: 362-375.

Hairston, Nelson G., Sr. 1993. On the validity of the name *teyahalee* as applied to a member of the *Plethodon glutinosus* complex (Caudata: Plethodontidae): a new name. *Brimleyana*. 18: 65-69.

Hall, Robert O., Jr.; Meyer, Judy L. 1998. The trophic significance of bacteria in a detritus-based stream. *Ecology*. 79(6):1995-2012.

Hansen, **Randi A.**; Coleman, David C. 1998. Litter complexity and composition are determinants of the diversity and species composition of oribatid mites (Acari: Oribatida) in litterbags. *Applied Soil Ecology*. 9: 17-23.

Harper, Craig A.; Gynn, David C., Jr. 1998. A terrestrial vacuum sampler for macroinvertebrates. *Wildlife Society Bulletin*. 26(2): 302-306.

Harper, Craig A.; Gynn, David C., Jr. 1999. Factors affecting salamander density and distribution within four forest types in the Southern Appalachian Mountains. *Forest Ecology and Management*. 114: 245-252.

Harper, David; Wolcott, Michael; **Rials**, Timothy. 1998. Chemical and physical interpretation of MDI cure in saturated steam environments. In: Hague [and others], eds. Proceedings of the 2^d European panel products symposium; 1999 October 21-22; [Location of meeting unknown]. Llandudno, Wales, UK: 193-204. [Available from: The BioComposites Centre, UWB, Bangor, Gwynedd, LL572UW, UK.]

Heard, Michael S. 1998. Attitudes and perceptions of forest stakeholders regarding land management planning on U.S. Forest Service lands in Alabama. Knoxville, TN: University of Tennessee. 170 p. Ph.D. dissertation.

Hemingway, Richard W. 1998. Review of Practical polyphenolics: from structure to molecular recognition and physiological action by [name of author unknown]. *Journal of Natural Products*. 61(11): 1454-1455.

Hemingway, Richard W.; Pen, Weiling; Conner, Anthony H. [and others]. 1998. Acid-catalyzed rearrangements of flavans to novel benzofuran derivatives. In: Charbonnier, Florence; Delacotte, Jean-Michel; Rolando, Christian, eds. Polyphenol communications 98: Proceedings: 19th international conference on polyphenols; 1998 September 1-4; Lille, France. Bordeaux, France: Universite Victor Segalen, Laboratoire de Pharmacognosie: 191-192.

Hemingway, Richard W.; Steynberg, Petrus J.; **Steynberg**, Jan P.; Hatano, Tsutomu. 1999. NMR studies on the conformation of polyflavanoids and their association with proteins. In: Argyropoulos, Dimitris S., ed. Advances in lignocellulosics characterization. Atlanta: Tappi Press: 157-178.

Hendrix, **Shannon Rae**. 1998. Factors affecting conservation practice behavior of CRP participants in Alabama. Normal, AL: Alabama Agricultural and Mechanical University. 74 p. M.S. thesis.

Heneghan, L.; Coleman, D.C.; Zou, X. [and others]. 1998. Soil microarthropod community structure and litter decomposition dynamics: study of tropical and temperate sites. *Applied Soil Ecology*. 9: 33-38.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Foundation Programs

Hessler, Edward W.; Stubbs, Harriett S. 1999. Trees: a sourcebook for teaching about trees, forests, and pollutants. The changes in the environment series. Dubuque, IA: Kendall/Hunt Publishing Co. 140 p.

Hicks, Norman G.; Menzel, Michael A.; Laerm, Joshua. 1998. Bias in the determination of temporal activity patterns of syntopic *Peromyscus* in the Southern Appalachians. *Journal of Mammalogy*. 79(3): 1016-1020.

Hodges, Donald G.; Gunter, James T.; Swalm, Christopher M.; Regens, James L. 1998. Impact of urbanization and environmental protection policies on timber availability: a GIS application. In: Geospatial information in agriculture and forestry: decision support, technology, and applications: Proceedings of the 1st international conference; 1998 June 1-3; Lake Buena Vista, FL. Ann Arbor, MI: ERIM International: 413-420. Vol. 1.

Hodges, Donald G.; Gunter, James T.; Swalm, Christopher M.; Regens, James L. 1998. Utilizing GIS to assess the impact of urbanization on timberland availability in southeastern Louisiana. In: Whiffen, H.J.H.; Hubbard, H.C., eds. SOFOR GIS '98: Proceedings of the 2^d southern forestry GIS conference; 1998 October 28-29; Athens, GA. Athens, GA: University of Georgia Center for Continuing Education, Daniel B. Warnell School of Forest Resources: 285-301.

Hse, Chung Y. [1999]. Overview of the wood adhesives industry in China. In: Christiansen, Alfred W.; Pilato, Louis A., eds. International contributions to wood adhesion research: Proceedings 7267; [Date of meeting unknown]; [Place of meeting unknown]. Madison, WI: Forest Products Society: 48-51.

Hutchens, John J., Jr.; Chung, Keun; Wallace, J. Bruce. 1998. Temporal variability of stream macroinvertebrate abundance and biomass following pesticide disturbance. *Journal of the North American Benthological Society*. 17(4): 518-534.

Johnsen, Kurt H.; Major, John E. 1999. Shoot water relations of mature black spruce families displaying a genotype X environment interaction in growth rate. I. Family and site effects over three growing seasons. *Tree Physiology*. 19(6): 367-374.

Johnson, Cassandra Y.; Bowker, J.M. 1999. On-site wildland activity choices among African Americans and white Americans in the rural South: implications for management. *Journal of Park and Recreation Administration*. 17(1): 21-39.

Kard, Brad. 1999. Mesh may fit in as a termite barrier. *Pest Control*. 67(2):50-51.

Kard, Brad. 1999. Termite control: results of testing at the U.S. Forest Service. In: Pest management: staying in tune with your industry: Proceedings of a convention; 1998 October 28-31; Nashville, TN. Dunn Loring, VA: National Pest Control Association, Inc.: 176-184.

Kard, Brad. 1999. Termiticides -the Gulfport report. *Pest Control*. 67(2):42-46.

Kilgo, John C.; Gartner, David L.; Franzreb, Kathleen E.; Gauthreaux, Sidney A. 1999. Validation of birdhab: a GIS model to predict bird-habitat relations. In: Southeastern working group of partners in flight meeting; 1999 January 28-30; Biloxi, MS. [Place of publication unknown]: [Publisher unknown], [Poster].

Kilgo, John C.; Labisky, Ronald F.; Fritzen, Duane E. 1998. Influences of hunting on the behavior of white-tailed deer: implications for conservation of the Florida panther. *Conservation Biology*. 12(6): 1359-1364.

I Klepac, John; Reutebuch, Stephen E.; Rummer, Bob. 1999. An assessment of soil disturbance from five harvesting intensities. In: 1999 ASAE annual international meeting: emerging technologies for the 21st century; 1999 July 18-21; Toronto, Ontario, Canada. Pap. 99-5052. St. Joseph, MI: American Society of Agricultural Engineers. 16 p.

Kloepfel, Brian D.; Garrison, Lynne; Guy, Mark [and others]. 1999. K-16 research in the Coweeta LTER program. Presented at the Ecological Society of America annual meeting; 1999 August 7-12; Spokane, WA. [Poster].

Kloepfel, Brian D.; McCollum, Robert; Garrison, Lynne. 1998. Presented at Coweeta schoolyard LTER initiative, 1st schoolyard LTER workshop; 1998 October 23-24; Oracle, AZ. [Poster].

Our Most Important Product: Knowledge

Foundation Programs

Knoepp, Jennifer D.; Swank, Wayne T. 1998. Rates of nitrogen mineralization across an elevation and vegetation gradient in the Southern Appalachians. *Plant and Soil*. 204: 235-241.

Koppes, Steven N. 1998. Down in the dirt. University of Georgia Research Reporter. 28(1): 7-14.

Lemly, A. Dennis. 1998. A position paper on selenium in ecotoxicology: a procedure for deriving site specific water quality criteria. *Ecotoxicology and Environmental Safety*. 39: 1-9.

Lemly, A. Dennis. 1998. Bacterial growth on stream insects: potential for use in bioassessment. *Journal of North American Benthological Society*. 17(2): 228-238.

Lemly, A. Dennis. 1998. Pathology of selenium poisoning in fish. In: Frankenberger, W.T., Jr., comp., ed. *Environmental chemistry of selenium*. New York: Marcel Dekker, Inc.: 281-296.

Lemly, A. Dennis. 1998. Procedures and guidelines for using fish as biological models for evaluating potential teratogenic substances. Technical assistance report prepared for Dr. Ming-Cheng Tsai, Professor of Pharmacology, College of Medicine, National Taiwan University. 25 p. Available from: U.S. Department of Agriculture, Forest Service, Southern Research Station, Department of Fisheries and Wildlife Sciences,

Lemly, A. Dennis. 1999. Preliminary assessment of selenium hazards on Caribou National Forest, Idaho. Technical assistance report to Caribou National Forest. Blacksburg, VA: U.S. Department of Agriculture, Forest Service, Southern Research Station, Department of Fisheries and Wildlife. 20 p.

Lloyd, F. Thomas; Waldrop, Thomas. 1999. Backburning as an alternative to traditional precommercial thinning. *Tree Farmer: The practical guide to sustainable forestry*. May-June: 16-36.

Loomis, John; Bonetti, Kenneth; Echohawk, Chris. 1999. Demand for and supply of wilderness. In: Cordell, H. Ken, comp., ed. *Outdoor recreation in American life: a national assessment of demand and supply trends*. Champaign, IL: Sagamore Publishing: 351-375. Chapter 7.

Major, John E.; Johnsen, Kurt H. 1999. Shoot water relations of mature black spruce families displaying a genotype X environment interaction in growth rate. II. Temporal trends and response to varying soil water conditions. *Tree Physiology*. 19(6): 375-382.

McMahon, Charles K. 1999. Forest fires and smoke impacts on air quality and human health in the U.S.A. In: *Proceedings, TAPPI international environmental conference; 1999 April 18-21; Nashville, TN*. Nashville, TN: TAPPI Press 2: 443-453.

Menzel, Michael A.; Carter, Timothy C.; Chapman, Brian R.; Laerm, Joshua. 1998. Quantitative comparison of tree roosts used by red bats (*Lasiurus borealis*) and Seminole bats (*L. seminolus*). *Canadian Journal of Zoology*. 76: 630-634.

Miller, J.H.; Miller, K.V. 1999. Forest plants and shrubs of the Southeast and their wildlife uses. 52nd annual meeting, southern weed science society: a glance to the past, a vision for the future; 1999 January 25-27; Greensboro, NC. [Poster].

Miller, James H. 1999. Controlling exotic plants in your forest. *Forest Landowner*. 58(2): 60-64.

Moffat, Stevenson O.; Cabbage, Frederick W.; Cascio, Anthony J.; Sheffield, Raymond M. 1999. The future of forest management on NIPF lands in the South: results of an expert opinion survey. In: Abt, Karen Lee; Abt, Robert C., eds. *SOFEW '98: Proceedings of the 1998 southern forest economics workshop; 1998 March 25-27; Williamsburg, VA*. Raleigh, NC: North Carolina State University, Department of Forestry: 17-24.

Mohd, Rusli bin; Laarman, Jan Ci. 1994. The struggle for influence: U.S. nongovernmental organizations and tropical forests. *Journal of Forestry*. 92(6): 32-36.

Onianwa, Okwudili O., Wheelock, Gerald C., Dubois, Mark R., Warren, Sarah T. 1999. Assessing the retention potential of conservation reserve program practices in Alabama. *Southern Journal of Applied Forestry*. 23(2): 83-87.

Otrosina, William J. 1999. Review of book: *"Heterobasidion Annosum: Biology, Ecology, Impact, and Control"*. (New York: CAB International. 1998.) *Forest Science*. 45(3): 470.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Foundation Programs

Pattanayak, Suhbrendu; Sills, Erin. 1999. Do tropical forests provide natural insurance? The case of small farmers in the Brazilian Amazon. Working paper 23 of the Duke-UNC Latin American studies program. Durham, NC: Duke University. 36 p.

Patterson, David W. 1999. Effects of market prices and silvicultural practices on lumber value of standing trees in uneven-aged plots. In: Ek, Alan R.; ZumBahlen, Bruce, comps. Proceedings: Improving forest productivity for timber—a key to sustainability; 1998 December 1-3; Duluth, MN. Twin Cities, MN: University of Minnesota: 301-304.

Pearson, Scott M.; Smith, Alan B.; Turner, Monica G. 1998. Forest patch size, land use, and mesic forest herbs in the French Broad River basin, North Carolina. *Castanea*. 63(3): 382-395.

Pearson, Scott M.; Turner, Monica G.; Urban, Dean L. 1999. Effective exercises in teaching landscape ecology. In: Klopatek, Jeffrey M.; Gardner, Robert H., eds. Landscape ecological analysis: issues and applications. New York: Springer-Verlag: 335-368.

Perry, Roger W.; Tappe, Philip A.; Peitz, David G. [and others]. 1996. A comparison of snap traps for evaluating small mammal populations. In: Eversole, Arnold G., ed. Proceedings of annual conference of the southeastern association of fish and wildlife agencies; 1996 October 5-9; Hot Springs, AR, [Location of publisher unknown]; Southeastern Association of Fish and Wildlife Agencies. 50: 280-286.

Peters, Daniel M.; Haney, H. Larry, Jr.; Greene, John L. 1998. The effects of Federal and State death and gift taxes on nonindustrial private forest lands in the Midwestern States. *Forest Products Journal*. 48(9): 35-44.

Piirto, Douglas D.; Parmeter, John R., Jr.; Cobb, Fields W., Jr.; Piper, Kevin L. 1998. Biological and management implications of fire-pathogen interactions in the giant sequoia ecosystem. In: Pruden, Teresa L.; Brennan, Leonard A., eds. Fire in ecosystem management: shifting the paradigm from suppression to prescription: Proceedings of the Tall Timbers fire ecology conference; 1996 May 7-10; Boise, ID. Tallahassee, FL: Tall Timbers Research Station: 325-336.

Post, D.A.; Grant, G.E.; Jones, J.A. 1998. New developments in ecological hydrology expand research opportunities. *EOS, Transactions, American Geophysical Union*. 79(43): 517-526.

Powers, Harry R., Jr.; Miller, T. [n.d.]. History of the southwide forest disease workshop 1959-1997. Southern Research Station Headquarters, Asheville, NC. [Not paged].

Pullis, Genevieve. 1998. Public perceptions of forest ecosystem attributes and economic values for small, private woodlots with and without alternative timber harvesting. Orono, ME: University of Maine. 138 p. M.S. thesis.

Reich, Peter B.; Walters, Michael B.; Ellsworth, David S. [and others]. 1998. Relationships of leaf dark respiration to leaf nitrogen, specific leaf area and leaf life-span: a test across biomes and functional groups. *Oecologia*. 114: 471-482.

Ross, Gary Noel. 1998. Butterfly social clubs. *Holarctic Lepidoptera*. 5(1): 22.

Roudik, Ronen. 1998. An investigation of user perceptions of repaired wood pallets, Blacksburg, VA: Virginia Polytechnic Institute and State University. 79 p. M.S. thesis.

Rudis, Victor A. 1999. Ecological subregion codes by county, conterminous United States. Gen. Tech. Rep. SRS-30. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 96 p.

Saenz, Daniel; Fitzgerald, Lee A.; Hibbits, Toby J. [and others]. 1999. Niche differences between species and sexes of sympatric *Rana catesbaeiana* and *Rana grylio*. Presented at a joint meeting of the American society of ichthyologists and herpetologists, 79th annual meeting; American elasmobranch society, 15th annual meeting; herpetologists' league, 47th annual meeting; society for the study of amphibians and reptiles, 42d annual meeting; 1999 June 24-30; State College, PA. 198 p. [Poster].

Sandberg, David V.; Hardy, Colin C.; Ottmar, Roger D. [and others]. [n.d.]. National strategic plan: modeling and data systems for wildland fire and air quality. In: Gen. Tech. Rep.-450. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 60 p.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Foundation Programs

Sargent, Robert A.; Kilgo, John C.; Chapman, Brian R.; Miller, Karl V. 1998. Predation of artificial nests in hardwood fragments enclosed by pine and agricultural habitats. *Journal of Wildlife Management*. 52(4): 1438-1 442.

Schaefer, Richard R. 1998. First county records of red crossbill in the pineywoods region of eastern Texas. *Bulletin of Texas Ornithological Society*. 31(2): 63-64.

Schiff, Nathan M.; Wilson, Alphas D. 1999. Siricoidea and their fungal symbionts. 4th international hymenopterists conference; 1999 January 6- 11; Canberra, Australia. [Poster].

Schmoldt, Daniel L. 1999. Expert systems and the environment. In: Alexander, David E.; Fairbridges, Rhodes W., eds. *Encyclopedia of environmental science*. Dordrecht, The Netherlands: Kluwer Academic Publishers: 243-246.

Schmoldt, Daniel L.; Peterson, David L.; Keane, Robert E. [and others]. 1999. Assessing the effects of fire disturbance on ecosystems: a scientific agenda for research and management. Gen. Tech. Rep. 455. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 104 p.

Schmoldt, Daniel L.; Winn, Matt F.; Araman, Philip A. 1998. Web site access statistics and delivery of research results. In: Johnson, James E., ed. *Extension forestry: bridging the gap between research and applications; Extension working party S6.06-03: Proceedings of symposium; 1998 July 19-24; Blacksburg, VA. Blacksburg: Virginia Polytechnic institute and State University, College of Forestry and Wildlife Resources: 79-86.*

Schweitzer, C.J. 1999. Large-scale comparison of restoration techniques: Bottomland forest re-establishment cooperative studies. In: Progress report regarding Sharkey cooperative study from 1997- 1998. United States Department of Interior, Fish/Wildlife. Atlanta: 6-11.

Schweitzer, C.J. 1999. Large-scale comparison of restoration techniques: Herbaceous plant invasion and diversity. In: Progress report regarding Sharkey Cooperative study from 1997- 1998. United States Department of Interior, Fish/Wildlife. Atlanta: 10-12.

Schweitzer, C.J.; Gardiner, Emile S.; Stanturf, J.A.; Ezell, A.W. 1999. Methods to improve establishment and growth of bottomland hardwood artificial regeneration. In: Lacki, Michael; Barnes, Thomas; Muller, Robert, eds. 12th central hardwood forest conference; 1999 February 28-March 2; Lexington, KY. Gen. Tech. Rep. SRS-24. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 209-214.

Schweitzer, C.J.; Sharpe, W.E.; Edwards, P.J. 1999. The effect of soil manganese on Japanese larch (*Larix leptolepis* Sieb. and Zucc.) seedlings in the greenhouse. In: Lacki, Michael; Barnes, Thomas; Muller, Robert, eds. 12th central hardwood forest conference; 1999 February 28-March 2; Lexington, KY. Gen. Tech. Rep. SRS-24. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 240-244.

Schweitzer, Callie Jo; Sharpe, William E.; Edwards, Pamela J. 1999. The effect of soil manganese on Japanese larch (*Larix Leptolepis* Sieb. and Zucc.) seedlings in the greenhouse. In: Stringer, Jeffrey W.; Loftis, David L., eds. 12th central hardwood forest conference; 1999 February 28-March 2; Lexington, KY. Gen. Tech. Rep. SRS-24. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 240-244.

Shaffer, R.M.; Haney, H.L., Jr.; Worrell, E.G.; Aust, W.M. 1998. Forestry BMP implementation costs for Virginia. *Forest Products Journal*. 48(9): 27-29.

Siegel, William. 1999. Tax implications of forest property exchanges. *National Woodlands*. 22(2): 21-24.

Siegel, William. 1999. Types of timberland ownership. *National Woodlands*. 22(3): 22-24.

Siegel, William C. 1998. The importance of keeping good records. *National Woodlands*. 21(4): 22-23.

Our Most Important Product: Knowledge

Foundation Programs

Siegel, William C. 1999. Figuring the tax on timberland income. National Woodlands. 22(1): 21-23.

Spinelli, Raffaele; Hartsough, Bruce R. 1999. Comparison of a skidder and a front-end loader for primary transport of short-rotation trees. Technical paper 995054 presented at 1999 ASAE annual international meeting: emerging technologies for the 21st century; 1999 July 18-21; Toronto, ON. St. Joseph, MI: American Society of Agricultural Engineers. 10 p.

Stanturf, John A.; Schweitzer, Callie J.; Schoenholtz, Stephen H. [and others]. 1998. Ecosystem restoration: fact or fancy? In: Wadsworth, Kelly G., ed. Transactions of the 63rd North American wildlife and natural resources conference: changing resource values in challenging times; 1998 March 20-24; Orlando, FL. Washington, DC: Wildlife Management Institute. 63: 376-383.

Steelman, Toddi A. 1999. The public comment process: what do citizens contribute to national forest management? Journal of Forestry. 97(1): 22-26.

Stone, Michael K.; Wallace, J. Bruce. 1998. Long-term recovery of a mountain stream from clear-cut logging: the effects of forest succession on benthic invertebrate community structure. Freshwater Biology. 39: 151-169.

Stringer, Jeffrey W.; **Loftis, David L.**, eds. 1999. Proceedings: 12th central hardwood forest conference; 1999 February 28-March 2; Lexington, KY. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 303 p.

Sung, Shi-Jean S.; Xu, Dianpeng; Kormanik, Paul P.; Black, Clanton C. 1998. Photosynthesis and the xanthophyll cycle-mediated photoprotection in leaves of *Quercus rubra* and *Q. alba* seedlings of different light environments. In: Steiner, Kim C., ed. Diversity and adaptation in oak species: Proceedings of the 2^d meeting of working party 2.08.05, genetics of *Quercus*; 1997 October 12-17; University Park, PA, University Park: Pennsylvania State University: 288-297.

Swank, Wayne T. 1998. Multiple use forest management in a catchment context. In: Cresser, M.; Pugh, K., eds. Multiple land use and catchment management: Proceedings of an international conference; 1996 September 11-13; Aberdeen, Scotland. Aberdeen, Scotland: The Macaulay Land Use Research Institute: 27-37.

Tang, R.C.; Pu, Jianhua; Hse, C.Y. 1998. Effect of resin variables on the creep behavior of high density hardwood composite panels. In: Hse, Chung-Yun, ed. Adhesive technology and bonded wood products: a symposium; 1993 May 25-28; Taipei, Taiwan, R.O.C. Taipei: Taiwan Forestry Research Institute: 606-614.

Tank, Jennifer Leah; Webster, J.R. 1998. Interaction of substrate and nutrient availability on wood biofilm. Ecology. 79(6): 2168-2179.

Tarrant, Michael A.; Bright, Alan D.; Cordell, H. Ken. 1997. Attitudes toward wildlife species protection: assessing, moderating, and mediating effects in the value-attitude relationship. Human Dimensions of Wildlife. 2(2): 1-20.

Tarrant, Michael A.; Bright, Alan D.; Smith, Erin; Cordell, H. Ken. 1999. Motivations, attitudes, preferences, and satisfactions among outdoor recreationists. In: Cordell, H. Ken, comp., ed. Outdoor recreation in American life: a national assessment of demand and supply trends. Champaign, Illinois: Sagamore Publishing. Chapter 9.

Tarrant, Michael A.; Cordell, H. Ken. 1999. Environmental justice and the spatial distribution of outdoor recreation sites: an application of geographic information systems. Journal of Leisure Research. 31(1): 18-34.

Tarrant, Michael A.; Cordell, H. Kenneth; Kibler, Tamela L. 1997. Measuring perceived crowding for high-density river recreation: the effects of situational conditions and personal factors. Leisure Sciences. 19: 97-112.

Tarrant, Michael A.; Overdeest, Christine; Bright, Alan D. [and others]. 1997. The effect of persuasive communication strategies on rural resident attitudes toward ecosystem management. Society & Natural Resources. 10: 537-550.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

Foundation Programs

Teasley, R. Jeff; Bergstrom, John C.; Cordell, H. Ken [and others]. 1999. Private lands and outdoor recreation in the United States, In: Cordell, H. Ken, comp., ed. Outdoor recreation in American life: a national assessment of demand and supply trends, Champaign, IL: Sagamore Publishing: 183-218. Chapter 4.

Tohmura, Shin-ichiro; Hse, Chung Yun; Higuchi, Mitsuo. [n.d.]. Heat stability of cured urea-formaldehyde resins by measuring formaldehyde emission. In: Christiansen, Alfred W.; Pilato, Louis A., eds. International contributions to wood adhesion research: Proceedings 7267; [Date of meeting unknown]; [Place of meeting unknown], Madison, WI: Forest Products Society: 93-100.

Tomita, Bunichiro; Yoshida, Yasunori; Hse, Chung Yun. 1998. Kinetics on cocondensation of phenol and urea. In: Hse, Chung-Yun, ed. Adhesive technology and bonded tropical wood products: a symposium; 1993 May 25-28; Taipei, Taiwan, R.O.C. Taipei: Taiwan Forestry Research Institute: 71-83.

Toms, Christopher W.; Bliss, John C.; Wilhoit, John H.; Rummer, Robert B. 1998. Horse and mule logging in Alabama: a forest management tool for the future? In: Proceedings: international symposium on integrating environmental values into small-scale forestry; 1998 August 16-20; Vancouver, BC. Joensuu, Finland: European Forest Institute. 25 p.

Tong, Chao. 1998. The effectiveness of splicing notched pallet stringer segments with metal connector plates. Blacksburg, VA: Virginia Polytechnic Institute and State University. 75 p. M.S. thesis,

Valles, Steven M.; Weste, L.A.; Osbrink, Faith M. 1998. Cytochrome P450 monooxygenase activity in the dark southern subterranean termite (Isoptera: Rhinotermitidae). *Journal of Economic Entomology*. 91(5):1131-1135.

Vechinski, C.R.; Johnson, C.E.; Raper, R.L. 1998. Evaluation of an empirical traction equation for forestry tires. *Journal of Terramechanics*. 35: 55-67.

Vechinski, C.R.; Johnson, C.E.; Raper, R.L.; McDonald, T.P. 1999. Forestry tire tractive performance: new, worn, and with chains. *Applied Engineering in Agriculture*. 15(4): 263-266.

Vose, James M.; Swank, Wayne T.; **McCollum, Bob**; Steiner, Susan. 1998. Effectiveness of riparian restoration on water, soil, and air quality. Presented at SAMAB annual fall conference; 1998 November 4-6; Gatlinburg, TN. [Poster].

Wagner, John E.; Holmes, Thomas P. 1998. Estimating economic gains for landowners due to time-dependent changes in biotechnology. *Forest Science*. 45(2):163-170.

Wagner, T.L.; Villavaso, E.J. 1999. Respiration rates of reproductively active and diapausing boll weevils. In: 1999 proceedings: beltwide cotton conferences; 1999 January 3-7; Orlando, FL. Memphis, TN: National Cotton Council of America. 2: 1155-1158. Vol. 2.

Wagner, Terence L.; Villavaso, Eric J. 1999. Diapause in the boll weevil (Coleoptera: curculionidae): seasonal occurrence in Mississippi populations. *Annals of the Entomological Society of America*. 92(3): 382-395.

Wagner, Terence L.; Villavaso, Eric J. 1999. Effects of temperature and adult diet on development of hypertrophied fat body in prediapausing boll weevil (Coleoptera: curculionidae). *Annals of the Entomological Society of America*. 92(3): 403-413.

Wagner, Terence L.; Villavaso, Eric J.; Willers, Jeffrey L. 1999. Diapause in the boll weevil (Coleoptera: curculionidae): life-stage sensitivity to environmental cues. *Annals of the Entomological Society of America*. 92(3): 396-402.

Wang, Lihai. 1999. Environmentally sound timber extracting techniques for small tree harvesting. Technical paper 995053 presented at 1999 ASAE annual international meeting: emerging technologies for the 21st century; 1999 July 18-21; Toronto, CN. St. Joseph, MI: American Society of Agricultural Engineers. 6 p.

Caring for the Land and Serving People

Our Most Important Product: Knowledge

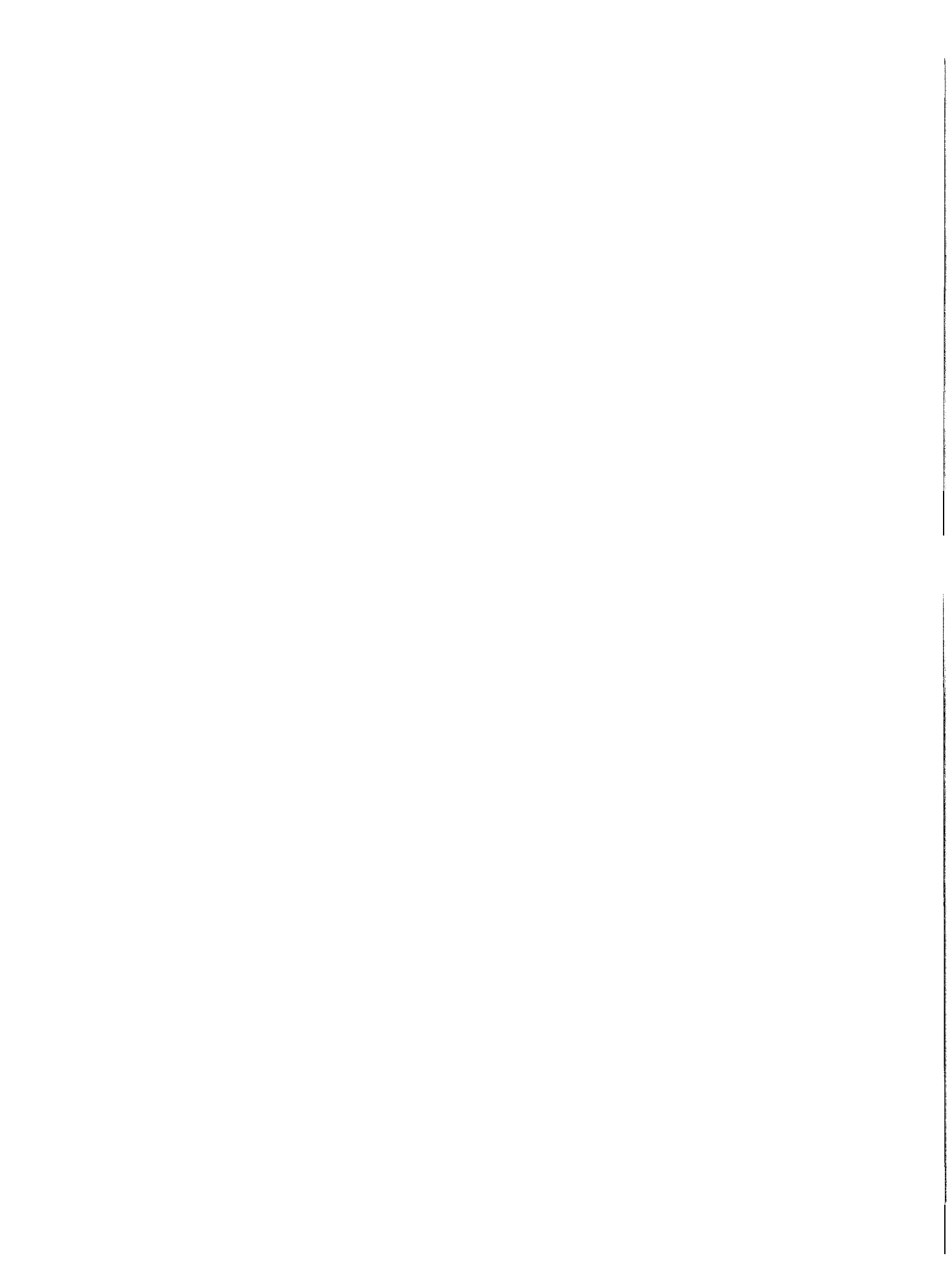
Foundation Programs

Watson, Alan; Cole, David N.; Friese, Gregory T. [and others]. 1999. Wilderness uses, users, values, and management. In: Cordell, H. Ken, comp., ed. Outdoor recreation in American life: a national assessment of demand and supply trends. Champaign, IL: Sagamore Publishing: 377-401. Chapter 8.

Wilson, A.D.; Lester, D.G. 1999. Incidence of trench breakouts following applications of trench insert barriers to control root transmission of *Ceratocystis Fagacearum* in Texas live oaks. 1999. In: McGrath, Margaret Tuttle, ed. Biological and cultural tests for control of plant diseases. St. Paul, MN: APS Press. 65. Vol. 14.

Yeakley, J.A.; Swank, Wayne T.; Swift, Lloyd W., Jr. [and others]. 1998. Soil moisture gradients and controls on a Southern Appalachian hillslope from drought through recharge. *Hydrology and Earth System Sciences*. 2(1):41-49.

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