

Project Leader's Report

May - 2003



USDA Forest Service - Southern Research Station - 320 Green Street Athens GA 30602 - <http://www.srs.fs.fed.us/disturbance>



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Technology Transfer :

- Mac Callaham attended the 9th Biennial Soil Ecology Society International Conference in Palm Springs, CA. He presented two posters, one from work performed at the Calhoun Experimental Forest in SC in collaboration with colleagues at the University of Georgia (UGA) and Duke University, entitled "Effects of long-term land use on organization and complexity of soil invertebrate communities in South Carolina Piedmont soils," and one from work originating at Kansas State, but that is ongoing with RWU-4104 personnel and UGA collaborators, entitled "Effects of native North American and introduced exotic earthworms on denitrification rates in two soils." He also co-authored an oral presentation reporting findings from FFS sites in Ohio and South Carolina, entitled "Structural and functional restoration effects on soil microbial activity in two contrasting forest ecosystems."
- John Stanturf attended the 2nd Forest Engineering Conference, hosted by Skogforsk (The Forestry Research Institute of Sweden), in Växjö, Sweden. Stanturf presented a

poster, "Developing an integrated system for mechanical reduction of fuel loads at the wildland/urban interface in the southern United States."

- Stanturf presented an invited seminar at the Southern Swedish Forest Research Centre, Swedish Agricultural University in Alnarp, Sweden on forest restoration. He met with Magnus Löf and discussed further cooperative research on the use of fire in regenerating oak stands.
- Alex Clark attended the Wood Quality Consortium Annual Meeting in Columbus, GA and provided an update of ongoing research.
- Deborah Kennard and Cynthia Fowler attended the Wildland Urban Interface Prevention Exchange Workshop in Birmingham, AL. They gave a presentation describing the Encyclopedia of Southern Fire Science, giving special emphasis to the encyclopedia's content on wildland urban interface. The workshop included State Foresters from 13 southeastern states.

Outreach Activities:

- Four organized groups with a total of 26 people visited the Brender Forest during the month of May. These groups included a Mercer University Environmental Science class, and an interagency meeting that consisted of Forest Service employees from the Oconee District and Supervisor's Office, Georgia Forestry Commission, U. S. Fish and Wildlife Service, and the Southern Research Station.
- Georgia Department of Natural Resources and State Prison Canine Units have been using the Brender Forest for training their German Shepard dogs and bloodhounds.
- Approximately 40 visitors came by the office at the Brender Forest for information and 56 people signed the register at the Hitchiti Interpretive Trail.
- Young men from Boy Scout Troop 170, Macon, GA, have signed up as volunteers and will be helping with trail work on the Brender Forest.
- On May 22, Tom Waldrop joined Dick Rightmyer of the Chattahoochee National Forest on a field trip with Summer Camp students from the Clemson University Department of Forest Resources. The students were learning methods to determine landscape position and how that affects ecosystem function. Dick and Tom introduced the students to operations on National Forests and to methods of ecosystem management. Tom discussed his work with using stand-replacement fire to perpetuate Table Mountain pine communities.

Continued p.2

Continued Outreach Activities

Continued

- Dale Wade, now retired, was featured in the Natural Enquirer issue on wildland fire (Vol. 4 No. 1, Spring 2003). The Natural Enquirer



- John Stanturf attended a meeting at Yale University on updating Ag Handbook 181, Inventory and Management of Southern Hardwoods, published in 1961. The updating effort is being led by Chad Oliver, Pinchot Professor of Forestry and Environmental Studies at Yale University, and Ted Leininger, Project Leader of SRS-



Southern bottomland hardwood stand

4155 in Stoneville, MS. Stanturf will assist John Adams, Professor of Forestry at Louisiana Tech University, in writing the section on soil, site, and soil/site relationships. A highlight of the meeting was participation by George Furnival, one of the authors of the original handbook (along with John Putnam and Sid McKnight). Furnival became a professor at Yale after leaving the Forest Service and lives in the New Haven area. Progress on the update can be tracked at http://research.yale.edu/gisf/ppf/southern_hardwood/index.html

- A voluntary paper submitted by Stanturf has been selected for presentation to the World Forestry Congress, to be held in September in Quebec, Canada. Over 1,000 papers were submitted to the Congress and this is one of the 10 to 20% that have been selected for presentation, after a scientific review process. The paper, "Plantation Forests in the United States: Past, Present, and Future", is co-authored by Daowei Zhang, Professor of Forest Economics at Auburn University.

- On May 28, Kenneth Outcalt made an oral presentation at Myakka River State Park to the Florida Section of Society for Range Management meeting (40 attendees). The presentation was on the Fire and Fire Surrogate Study and the effect of fire and alternative treatments on vegetation and forage production. During the question and discussion phase a private rancher made the comment that Forest Service Research was the most valuable, which was echoed by the rest of the private owners



and state agency personnel. The reason they hold this view is because our organization is seen as being non-biased, unlike the university, where they felt research is influenced by funding source and other state agencies and groups, which seem to have an agenda. Internally, we have long recognized the strength, but it is good to know our users also realize we are best at producing quality research

Safety Tips

From Gary Achtemeier-Lightning

- Do not stand next to tall trees, especially snags
- Do not take shelter under isolated trees to get out of the rain
- Do not stand along the edge of the woods. It is best to remain in the woods within an area of low to moderate height trees
- Do not stand next to boulders
- If caught in the open, sit down, pull up your legs and bury your head between your legs, you will be less likely to be hit in the head

Meetings / Reports :

• Tom Waldrop and Kim Crider met with John Blake of the Savannah River Forest Station to discuss research progress and direction on the Savannah River Site (SRS). Kim and Tom are working on diversity questions related to pine-hardwood regeneration practices on the SRS. Kim will complete her M.S. Thesis in June.

• Tom Waldrop and Sandra Rideout met with Dr. Robert Bixler of Clemson University on May 12 to discuss plans for a new cooperative research agreement. Dr. Bixler will be investigating public reaction and preferences to fuel reduction treatments. This work will focus on the southern Appalachian site of the National Fire and Fire Surrogate Study.

• The Florida Division of Forestry hosted a conference call with other land management agencies and the National Weather Service to discuss the state's current standards for Red Flag Warnings/Fire Weather Watches. Scott Goodrick was asked to participate in the call as an expert on fire weather conditions in Florida and will help in developing a climatology that will form the basis for evaluating the current warning criteria.

• Gary Achtemeier and Scott Goodrick attended the North Carolina Forest Service Annual Fire Weather/Fire Danger Meeting. Achtemeier presented an overview of the Southern High Resolution Modeling Consortium (SHRMC) and presented some of his current research, while Goodrick gave a description of current and future products that will be available through SHRMC.

• Joe O'Brien met with Norm Thomas, Alachua County, FL Assistant Public Works Director to discuss plans for incorporating fire research into their planned restoration of the Balu Forest, a recently purchased, 1500-acre forest preserve. The county originally planned to use the site as a landfill, but now plans to restore longleaf pine to

the site. O'Brien toured the site with Dr. Greg Starr, University of Florida, and discussed ways they could collaborate and incorporate their research interests to help with the restoration.

• Joe O'Brien has been invited by Dr. Ron Myers of the Nature Conservancy to travel to the Dominican Republic to help assess fire management needs and issues. The trip is planned for July and will cover several sites throughout the country, focusing on rare Caribbean pine forests.

• John Stanturf and David Van Lear, Clemson University, were included as co-PIs in a research proposal "Prescribed fire for restoring, regenerating, and improving oak-dominated (*Quercus robur* L. and *Quercus petraea* (Matt.) Liebl.) forests," submitted by Mats Niklasson and Magnus Löf to the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning.

• Deborah Kennard and Cynthia Fowler participated in a beta testing of the software for the Encyclopedia of Southern Fire Science. William Hubbard, Bryan Jordin, and Willie Milnor from the Georgia Cooperative Extension Service are developing the new software program with funding from the unit under the National Fire Plan. The software enables editors, authors, and reviewers to participate in a peer review system that takes place entirely in hyperspace.

• The unit is planning for three upcoming meetings. On July 1, Jaimie Barbour from the Pacific Northwest Research Station and Ron McRoberts from the North Central Research Station will meet with unit staff to discuss how to better represent southern fuel conditions and treatment needs in the decision support system they developed for State and Private Forestry. On July 7, John Stanturf, Michael Wimberly, and Yangjian Zhang (UGA) will host a meeting on their wildland-urban interface research. Looking farther out, in November 2004 the unit will



Joe O'Brien and Ken Outcalt testing a new portable photosynthesis system with pulse modulated fluorometer.

help host a short-rotation woody crops meeting in Charleston, SC. Mark Coleman at the Savannah River Site is the lead on the meeting which will be co-sponsored by the Short-Rotation Woody Crops Operations Working Group, the International Energy Agency Biofuels Task Group, and the IUFRO Short-Rotation Working Group.

• Dexter Bland, out certified chainsaw instructor, held a chainsaw safety class at Rock Eagle Lake on the Oconee National Forest. Alex Clark's summer field crew was trained in proper tree felling and bucking techniques. The class format is patterned after the Game of Logging program. After each task or exercise, the evaluation begins and points are awarded. Safety is the main focus. After the chips stopped flying, Edward Andrews won top honors with Tyler Clemonds in a close second place.



Rock Eagle Lake, Oconee National Forest where Chainsaw Certification Test was held for Alex Clark's summer crew by Dexter Bland.

Personnel News :



Congratulations to Janet

- Janet Revell has accepted the position of Administrative Assistant in Athens (vice Gwen Jones), effective in mid-June.
- Debbie Burton, Administrative Support Assistant at Clemson, is leaving for a job with Region 8. Although not formally a member of the unit, she has provided invaluable support to the Clemson group and she will be missed. Good Fortune, Debbie, in your new position.

• A technician position is open in Andalusia, AL to support fire research (vice Joe McConnell). Information is available on USAJobs: <http://jsearch.usajobs.opm.gov/ftva.asp?OPMControl=IN9148>

• May 23 was Stephanie Pratt's last day at the Athens Lab. She was a student that worked in the Soil Ecology Lab processing soil samples in preparation for C and N analysis. She is off to work as an instructor at a summer camp. We appreciate her hard work and wish her well.

• Congratulations to Sandra Rideout and Terry Hanzak, who were married on May 31. Sandra, who was a confirmed flatlander (Indiana and Texas) has finally recognized the beauty of the Appalachian Mountains. The ceremony was conducted in Gatlinburg, TN and their wedding trip will be in the Great Smoky Mountains National Park. We all wish them many years of happiness.

• Mac Callaham broke his shoulder playing softball Memorial Day weekend. He's finding it's not easy doing things one-handed. We wish you a speedy recovery, Mac.



Mac Callaham is recovering from softball injury.

News from around the Region :

• The IUFRO Secretariat announced that a rising amount of spam e-mails has forced the IUFRO staff members to change their e-mail addresses from June 15, 2003. Individual e-mail addresses will consist of the surname followed by @iufro.org. A list of the new e-mail addresses of the IUFRO staff is on the web under <http://iufro.boku.ac.at/iufro/secre/secre.htm>

Visitors :

• Graeme Lockaby, Associate Dean of Forestry for Research at Auburn University, visited John Stanturf to discuss cooperative work on soil carbon in urbanizing landscapes.

• John Blake, Research Manager at the Savannah River Forest Institute, visited Stanturf to discuss potential to expand the fire research cooperation with the unit.

• Randy McCracken, SRS Webmaster, visited Pat Outcalt to discuss the unit's many websites and the impact of the USDA and Forest Service web regulations.

<http://www.srs.fs.fed.us/disturbance>

<http://www.srs.fs.fed.us/ffs>

<http://www.srs.fs.fed.us/bssrc>

<http://www.srs.fs.fed.us/brasil>

<http://www.srs.fs.fed.us/myakka>

<http://www.srs.fs.fed.us/solondixon>

<http://www.srs.fs.fed.us/smoke>

<http://www.srs.fs.fed.us/iufro>

• The National Park Service, National Park Foundation, and Ecological Society of America have announced the 2003 National Parks Ecological Research Fellowship Program. The program encourages and supports outstanding post-doctoral research in ecological sciences related to the flora of U.S. National Parks. The program has been funded through a grant from the Andrew W. Mellon Foundation. The program will award up to three fellowships each year to researchers who have recently completed their Ph.D. Awards are made for one to three years to support research in any area of ecology related to the flora of the National Parks. Research topics can address any level of ecological organization. Plants, cryptogamic crusts, lichens, or mosses must be the main focus of the research. Research that takes advantage of the range of environments, conditions, and scales available in National Parks is of particular interest. Fellowships are funded for \$50,000 per year for up to three years and can be used for research stipends, fieldwork expenses, equipment, attendance at scientific meetings and other research related expenses. Additional information and application materials are available at <http://www.esa.org/nper>. Completed applications must be received at ESA Headquarters between September 1, 2003 and October 1, 2003.

• A joint working group of the Society for Ecological Restoration International (SERI) and the Commission on Environmental Management of IUCN has called for case studies of restoration projects to be posted on their website in order to build a body of knowledge that improves the

News from around the Region :

success of restoration projects. Lessons learned from these case studies will be used to standardize terminology, recommend changes in policy on a local, national and international level, and provide an important communications tool. On the website, the Framework for the Selection and Description of Case Studies in Ecological Restoration can be downloaded. Examples can be found at www.iucn.org/themes/cem/work/restoration/rest_ill.htm

- CAP Ventures, Inc., a strategic consulting firm for the document technology industry, recently announced the completion of a new multi-client study entitled “The Future of Paper.” The report finds that the market for printing and writing paper is mature and growth rates are slowing. They forecast by the year 2021, the compound annual growth rate will be less than 1% per year. Nevertheless, 20 years from now, millions of people will still receive daily newspapers on their front steps, read printed books and magazines, browse catalogs, receive bills in the mail, and print reports, spreadsheets and presentations. The principal reason for this slowdown is change in behavior, which is driven by technological advances. Consumers, office workers, and publishers are changing their behavior in terms of how they view, communicate, collaborate, process, promote, and store information. In virtually all cases, the trend is to move towards more electronic delivery and less paper delivery. Despite the overall decline in the rate of growth for paper, there are many differences by application category (e.g. books, direct mail, bills and statements) and shifts occurring in where documents are printed. (Source: BUSINESS WIRE).

- Wide-scale use of biofuels, still little more than a pipe dream in many European countries, has been an increasingly significant energy source in Finland for the past decade. It is also a key part of the Finnish government’s energy strategy through 2010. The choice is largely pragmatic,

says Taisto Turunen, head of the energy department at Finland’s Ministry for Trade and Industry. By 2010, Finland must reduce its carbon emissions to 1990 levels as part of its Kyoto targets. The country cannot further increase its limited hydropower capacity, and biomass is Finland’s only other indigenous resource. The government is counting on biopower and other renewable sources to account for around a third of the reduction target. Some 60 to 80 small combined heat and power (CHP) plants are already operating in the country, including the 17 MW Forssa plant 130 kilometers west of Helsinki, built with an initial investment of EUR 17 million. The Forssa plant is a subsidiary of Vapo Oy, a company 30% owned by forest company Metsaliito and 70% by the Finnish government. Vapo operates 5 CHP plants in the country, using primarily peat, wood chips, sawdust and bark to produce its fuel. The government already provides tax subsidies for renewable energy producers, worth EUR 0.42 per kilowatt-hours for most green fuels, and EUR 0.69 per KWh for wind and forest chips. The state also offers up to EUR 25 million in investment subsidies for renewable energy generators. (Source: Dow Jones).

- The Swiss-based WWF and World Conservation Union (IUCN), as well as the Jakarta-based Centre for International Forestry Research, called for an end to what they said were economically and ecologically damaging subsidies for fast-growing tree plantations. In a joint report *Fast-Wood Forests: Myths and*

Realities issued for a United Nations conference on preserving natural forests, they also said that richer countries would have to cut consumption of paper and packaging if the forestry industry were to survive in the longer term. They argue that government subsidies allow industry to destroy natural forests by reducing the cost to private firms of starting up fast-wood forests. Fast forests, the first of which were planted on a large scale in Brazil 30 years ago and now cover huge areas also in Chile, Indonesia and Thailand as well as Portugal, produce timber much faster than natural forests. They have become a hot issue in some developing countries, setting governments, plantation owners and pulp companies against peasant farmers and ecologists, and have been the focus of demonstrations and political protests, even in Europe. The 50-page report argued that subsidies for such forests — mainly eucalyptus, pine, poplar and acacia trees — encourage both large and medium-sized businesses to start them up in areas where they would otherwise be economically unviable. But the report rejected arguments from some green groups and organizations of indigenous peoples, especially in Asia and Latin America, that large plantations were inevitably harmful. Well-managed and created on otherwise unused land, they could aid development, boost local economies by providing jobs, and stimulate the natural environment, according to the report. (Source: Reuters).

GPRA Accomplishments:

Category	FY 2002	FY 2003
	Total	To Date
Number of Refereed Journal Publications	9	10
Number of Non-Refereed Publications (include abstracts)	53	14
Number of Publications (refereed + non-refereed)	62	24
Number of Tours	46	59
Number of Short Courses/Training	8	8
Number of Invited Presentations to Scientific Organizations	6	7
Number of Invited Presentations to Lay Organizations	25	44
Volunteer Presentations to Scientific Organizations (non-GPRA)	28	23
Number of Technology Transfer Activities (other than above)	172	116
Outside Funding	\$3,227,500	\$1,805,563

News from around the Region :

- Centex Homes, International Paper, and Lanoga Corporation announced a halt to purchases of Indonesian pulp and wood, which new studies link to illegal logging that is threatening the existence of indigenous communities. This announcement coincides with the release of a report *Importing Destruction*, by the Rainforest Network (RAN), available for download at <http://www.ran.org>. WALHI, the Indonesian Forum on the Environment, and AMAN, the Alliance of Indigenous Peoples of the Archipelago, also released a report (*Certifying Destruction* also available for download at <http://www.ran.org>) dismissing efforts by some U.S. purchasers to pursue certification standards in Indonesia that would stamp certain species and specific forest concessions as acceptable for logging. WALHI and AMAN argue that prudent forest stewardship principles are untenable where corruption and illegal logging are rampant, and where indigenous communities do not have legal rights to manage their traditional lands. The reports bolster claims already made by Indonesia's Environment Minister calling for international efforts to curb the demand for illegally harvested timber. (Source: BUSINESS WIRE).

- A new study, *Importance of Canada's Boreal Forest to Landbirds*, documents for the first time that one in every three of North America's

songbirds is born in Canada's boreal forest (pdf copy can be downloaded at www.borealbirds.org/bsi-bscreport.pdf). According to the new study, authored by Dr. Peter Blancher of Bird Studies Canada, the Boreal is the breeding grounds of up to five billion land birds each year, for several species including species such as the Palm Warbler, Tennessee Warbler, Black-backed Woodpecker, Connecticut Warbler, and Northern Shrike, over 90 percent of their global population breed in the Canadian boreal forest. More than half of the world populations of nearly 40 bird species also nest in the Canadian Boreal Forest. Almost 200 land bird species breed in the boreal forest and wetlands every summer. By fall, as many as five billion of North America's birds — including warblers, sparrows, swifts, finches, hawks and falcons — migrate south from the region for the winter. Over 40 percent of North American waterfowl also use the boreal forest of Canada and Alaska, and for 35 species of water birds, the boreal region forms more than half of their breeding grounds. Canada's boreal forest covers more than one billion acres across nearly every province and territory. Though it is the largest intact forest left on earth — 50 percent larger than the remaining intact Amazon rain forest — Canada's boreal faces new and increasing threats from industrial development. Report found that several boreal-breeding bird populations are in

sharp decline, including Connecticut Warblers, Rusty Blackbirds and Canada Warblers. The reasons for the decline are not yet fully understood. (Source: PRNewswire).

- Forest industry continues to divest timberland. LP has signed a letter of intent to sell its Saratoga block of timberland in Southeastern Texas to an undisclosed buyer for approximately \$30.5 million, or \$700 per acre. The Saratoga block consists of approximately 43,500 acres of timberland. LP recently finalized the sale of approximately 48,000 acres of timberland in western Louisiana to Roy O. Martin Lumber Company LP of Alexandria, Louisiana. The net sale price was approximately \$32.5 million, which reflects adjustments for timber harvesting and other items. In May 2002, LP announced an asset sale and debt reduction program designed to enhance its long-term competitiveness and financial flexibility. (Sources: Reuters and BUSINESS WIRE).

- Weyerhaeuser Co. probably won't make any major acquisitions until it reduces debt, according to CFO Richard Taggart. The paper and forest product company has been racked with debt since taking over rival Willamette Industries Inc. in March last year. One area Weyerhaeuser is eyeing to find ways to operate more efficiently is in timberland. Weyerhaeuser Co., the world's largest lumber company, will sell 346,000 acres of timberland it acquired in three states when it bought Willamette Industries in 2001. Weyerhaeuser will sell all 174,000 acres it owns in Tennessee and all 122,000 acres it owns in South Carolina, and about 50,000 acres in North Carolina. After the sales, the company will still own or manage some 552,000 acres of timberland in North Carolina. While the sale involves a large number of acres, it would reduce Weyerhaeuser's land holdings in the United States by less than 5 percent. The company owns 7.5 million acres in the United States and manages 50 million acres. (Sources: AP and Dow Jones).



Tennessee Warbler breeds in Canada's boreal forest

News - continued:

• MeadWestvaco Corporation announced that it is exploring the sale of its 636,000 acres of commercial forestland in Maine and New Hampshire. A sale, the company said, will be contingent upon three factors: favorable price; long-term wood supply agreements for the company's paper mill in Rumford, Maine; and continued third-party certification to ensure that the land is managed using sustainable forestry practices. Last year, following a strategic review and assessment of its more than 3 million acres of forestland, MeadWestvaco announced its intention to sell approximately 700,000 acres of U.S. forestland. This was in addition to 250,000 acres remaining from a previous divestiture program implemented by the former Westvaco Corporation. At the end of the first quarter of 2003, approximately 830,000 acres remain to be divested under these previously announced programs. Of the 636,000 acres of New England forestland announced for sale, approximately 50 percent are in addition to the divestiture program of 950,000 acres of non-strategic forestland. (Source: PRNewswire-FirstCall).



Publications :

FY 2003 (* denotes new publication this month)

Escalante Fernandez, R. Monreal Rangel, S., **Stanturf, J.**, Arseneau, C., Nantel, P. 2002. Forest plantations in North America. Report to the North American Forestry Commission. 26 pp.

Glitzenstein, J. S., Streng, D. R., and **Wade, D. D.** 2003. Fire frequency effects on longleaf pine (*Pinus palustris* P. Miller) vegetation in South Carolina and Northeast Florida, USA. *Natural Areas Journal* 23:22-37.

Hanula, J. L., **Wade, D. D.** 2003. Influence of long-term dormant-season burning and fire exclusion on ground-dwelling arthropod populations in longleaf pine flatwoods ecosystems. *Forest Ecology and Management* 175 (1-3): 163-184.

Kennard, D. K., Outcalt, K., and Carrington, M. 2002. *Serenoa repens* (Bartr.) Small saw palmetto. In: J. K. Francis (ed.) Wildland shrubs of the United States and its territories. Gen. Tech. Rep. IITF-WB-1. 3 p. Published on website www.fs.fed.us/global/iitf/wildland_shrubs.htm.

Lockaby, B. G., Keeland, B. D., **Stanturf, J. A.**, Rice, M. D., Hodges, G., Governo, R. M. 2002. Arthropods in decomposing wood of the Atchafalaya River Basin. *Southeastern Naturalist* 1(4): 339-352.

Miller, S.R. and **Wade, D.** 2003. Re-introducing fire at the urban/wild-land interface: planning for success. *Forestry* 76 (2): 253-260.

Moody, J. M. 2002. Fire and alternative fuel treatment effect on soil Nitrogen: A case study of Myakka River State Park. M.Sc. thesis, FL A&M Univ., Tall., FL. 52 p.



Publications :

Rideout, S. and Oswald, B. P. 2002. Effects of prescribed burning on vegetation and fuel loading in three east Texas state parks. *Texas J. Science* 54(3): 211-226.

Rideout, S., Oswald, B. P., and Legg, M. H. 2003. Ecological, political and social challenges of prescribed fire restoration in east Texas pineywoods ecosystems: a case study. *Forestry* 76 (2): 261-269.

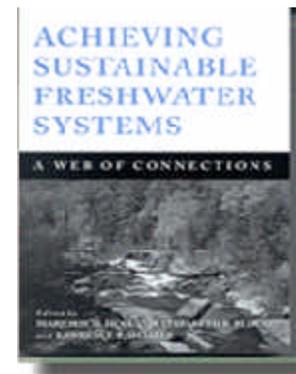
***Stanturf, J. A.**, Gardiner, E. S., and Warren, M. L., Jr. 2003. Restoring forested wetland ecosystems. P. 193-220 (Chapter 9) In Holland, M. M, Blood, E. R., and Shaffer, L. R. *Achieving sustainable freshwater systems*. Island Press, Washington.

Stanturf, J. A., Kellison, R. C., Broerman, F. S., and Jones, S. B. 2003. Productivity of southern pine plantations: Where are we and how did we get here? *Journal of Forestry* 101 (3): 26-31.

Stanturf J. A. and Madsen, P. 2002. Restoration concepts for temperate and boreal forests of North America and Western Europe. In: Forest Ecosystems: Ecology, Conservation and Sustainable Management (eds. Jiang, Z., Centritto, M., Liu, S. & Chiatante, D.). *Plant Biosystems* 136, 143-158.

***Stanturf, J.**, Rummer, R., Wimberly, M., Rials, T., Araman, P., Busby, R., Granskog, J., and Groom, L. 2003. Developing an integrated system for mechanical reduction of fuel loads at the wildland/urban interface in the southern United States. P. 135-138 In Iwarsson-Wide, M. and Hallberg, I., editors, Proceedings from Forest Engineering Conference: Posters Techniques and Methods. Arbetsrapport från Skogforsk Nr. 539. Uppsala, Sweden: Skogforsk-The Forestry Research Institute of Sweden.

Stanturf, J. A., Wade, D. D., Waldrop, T. A., Kennard, D. K., and Achtemeier, G. L. 2002. Fire in Southern Forest Landscapes. P. 607-630 (Chapter 25) In Wear, D. M. and Greis, J. G., editors, Southern Forest Resource Assessment. Gen Tech Rep. SRS-53. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station.



Upcoming Events :

2003

- *Jun 4-5 Terrestrial Plant Invasions in the Temperate South Workshop, Greenville, SC. www.clemson.edu/extfor/changes/IS%20web%20brochure.htm
- Jun 16-20 Fourth Annual North American Forest Ecology Workshop, Oregon State University in Corvallis, OR. <http://outreach.cof.orst.edu/nafew/>
- *Jun 17-18 AF&PA-CORE 2003 Meeting, Forest Products Laboratory, Madison, WI. Alex Clark will attend and make a presentation.

“If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them.”

Ralph Waldo Emerson

Upcoming Events :

Jun 22-25	57th Annual Meeting of the Forest Products Society, Doubletree Hotel, Bellevue, WA. Alex Clark will make presentation.	Sep 29-Oct 3	Integration of Silviculture and Genetics in Creating and Sustaining Oak Forests, Tsukuba, Japan. http://www.ffpri.affrc.go.jp/symposium/oak2003/
Jun 28-Jul 2	Society for Conservation Biology, Duluth, Minnesota. http://www.conservationbiology.org/2003	Oct	Annual Entomological Society of America Symposium in Cincinnati, OH. Callaham invited to give presentation.
Jul 20-24	10th North American Forest Soils Conference, Sault Ste. Marie, Ontario, Canada. Stanturf and Callaham to attend and present posters. http://www.fs.fed.us/forestsoilsconference	Oct 2-3	Enhancing the Southern Appalachian Forest Resource Symposium, Kanuga Conference Center, Hendersonville, NC. http://www.ces.ncsu.edu/nreos/forest/feop/symposium
Aug 11-14	IUFRO Working Group for Seed Physiology and Technology Conference to be held at the Georgia Center, Athens, GA.	Oct 4-8	3rd International Wildland Fire Conference, sponsored by the North American Forest Commission's Fire Management Working Group, Sydney, Australia. Achtemeier to attend. http://www.wildlandfire03.com
Sep 7-10	Council on Forest Engineering Annual Meeting, Bar Harbor, ME. http://www.forest-resources.umaine.edu/nercofe/cofe2003.htm	Oct 7-9	Management Team Meeting, SRS
Sep 16-18	IUFRO Conference on Strong Winds and Trees: Ecology and Management, sponsored by WP 8.08.02 and University of Karlsruhe, Germany; re-scheduled from Aug 17-24 in Zurich; http://www.ifh.uni-Karlsruhe.de/ifh/science/aerodyne/windconf.htm	*Oct 14-21	International Conference on ECO-RESTORATION, Dehradun and New Delhi, India.
Sep 18	Agroforestry and Wildlife Field Day, Griffin, GA.	Oct 25-29	Society of American Foresters Annual Meeting, Buffalo, NY
Sep 21-28	12th World Forestry Congress, Quebec City, Canada; Stanturf to attend. http://www.wfc2003.org	Nov 2-6	Soil Science Society of American Annual Meeting, Denver, CO
Sep 28-Oct 2	The Question of Conversion of Coniferous Forests Meeting, Freiburg,	*Nov 3-7	Invasive Plants in Natural and Managed Systems: Linking Science and Management and 7th International Conference on the Ecology and Management of Alien Plant Invasions, Ft. Lauderdale, FL. http://esa.org/ipinams-mapi7/abstractcall.htm
		*Nov 4-6	SAMAB Fall Conference, Asheville, NC. http://samab.org/Conf/Conf03/conf03.html

Upcoming Events :

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|--------------------|--|--------------|--|
| *Nov 16-19 | National Fire Risk Assessment Conference, Portland, OR. | Aug | Society for Ecological Restoration 16th International Conference, Victoria, British Columbia. |
| Nov 16-20 | Second International Congress on Wildland Fire Ecology and Fire Management, in conjunction with the Fifth Symposium on Fire and Forest Meteorology | Sep 3-7 | European Forest Institute (EFI) Annual Meeting, Bangor, Wales (UK). |
| Nov 19-22 | Society for Ecological Restoration 15th International Conference, Austin, TX. http://www.ser.org | *Sep 12-16 | IUFRO Conference Regenerating Mountain Forests, Kloster Seeon, Bavaria, Germany; http://www.forst.tu-muenchen.de/events/rmf2004/index_en.html |
| *Nov 27 -Dec 5 30) | IEA Short Rotation Bioenergy (Task Meeting, New Zealand and Australia. Stanturf to attend. http://www.shortrotationcrops.com/events.htm | Oct 31-Nov 3 | Soil Science Society of America Annual Meeting, Seattle, WA. |
| 2004 | | *Nov 17-25 | IUCN Third World Conservation Congress (WCC), Bangkok. |
| Mar 2-4 | Southern Research Station All Scientists Meeting | Nov | Short Rotation Woody Crops Operations Working Group Biennial Meeting, Charleston, SC. Dates to be announced. |
| *Mar 17-19 | 14th Central Hardwood Forest Conference, Wooster, OH. http://www.oardc.ohio-state.edu/chfc2004/ | 2005 | |
| Jun 21-25 | IUFRO Division 1 - Silviculture Conference, CIRADForest, in Montpellier, France. | Aug 8-13 | IUFRO World Congress, Brisbane, Australia. Stanturf to attend. http://www.iufro2005.com |
| Jun 27-Jul 2 | First Agroforestry World Congress, Orlando, FL | Aug/Sep | Society for Ecological Restoration 17th International Conference, Zaragoza, Spain. |
| *Jul 25-31 | 7th INTECOL International Wetlands Conference, Utrecht, The Netherlands. http://www.bio.uu.nl/INTECOL | Nov 6-10 | Soil Science Society of American Annual Meeting, Salt Lake City, UT |

SRS-4104 Project Leader's Report

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