

# SOUTHERN RESEARCH STATION



ASHEVILLE,  
NORTH CAROLINA

WINTER/SPRING1997

## North American Forest Commission Met in Asheville, November 1996

The Eighteenth Session of the North American Forest Commission (NAFC) of the Food and Agriculture Organization (FAO) of the United Nations was in Asheville, November 18-22, 1996. USDA Forest Service Chief Jack Ward Thomas hosted the meeting, along with the head of the Canadian Forest Service, Dr. Yvan Hardy, the Undersecretary for Natural Resources for Mexico, Dr. Oscar Gonzalez, and the Assistant Director General for Forestry, FAO, Dr. David Harcharik. NAFC was established in 1959 and currently supports collaborative research and natural resource management in Mexico, the United States, and Canada in seven areas: fire management, insects and diseases, atmospheric change and forests, silviculture, forest genetic resources, neotropical migratory species, and forest products.

The session began with a visit to the Southern Research Station on Monday to view 75th Anniversary Open House exhibits about current research projects. Members of the Commission also visited several local sites associated with forest research and forest products. Chief Thomas held a listening session with Station employees after the commission meeting was over.



*Shown at Bent Creek: David Loftis, Jerry SESCO, Pete Roussopoulos, Jack Ward Thomas*

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## Ecological Unit Map Now on CD

The Southern Research Station has collaborated with the Southern Region, and other Forest Service partners, to produce a CD-ROM version of the 1995 map: "Ecological Units of the Eastern US-First Approximation." In support of Forest Service policy of using an ecological approach to resource management, this map is the latest in a series that delineates ecological units from continental to local scales. Henry McNab, the SRS participant in this national project, has a small supply of CDs for distribution to potential SRS users who have access to a geographic information system. He is seeking review and comments on the map and upon request will send a CD to one person at each field unit. National Forests are beginning to use ecological units for planning, assessment, and monitoring. Henry would like SRS researchers in all disciplines to consider whether these ecological units might be useful in their work. For example, could researchers use the map to indicate on which ecological units land managers could apply specific study results? Contact Henry via DG at H.McNab:S33A for more information.

## **Director's Corner**

I just got back from the Research Support Conference in Atlanta and want all involved to know how grateful I am both for the hard work that went into making it a success and for the high level of involvement by the participants. Our research units are lucky to have such a dedicated, creative, and knowledgeable cadre of support personnel.

The conference came at a time of unprecedented change for our research and administrative units, and we took good advantage of this gathering to advance our efforts toward addressing last year's Continuous Improvement Process (CIP) survey results. Downsizing and consolidation of units and functions have created stresses that showed up clearly on our CIP results. Adding to these stresses have been tensions between research and administrative units and among the Station leadership, unit supervisor, and employee levels of the organization. Employee concerns about fairness, quality of supervision, advancement opportunities, access to information, participation in decisionmaking, and internal customer service are consistent themes in the survey result. To me, the value of CIP is in bringing those concerns into the open and resolving them in a nonthreatening setting.

We have begun to work on all of these concerns. Every unit, be it research or administration, has met to develop a CIP action plan. Members of the Leadership Team have done the same with the group and project leaders who report to them. The Leadership Team has met twice exclusively on CIP, once to develop an action plan for its internal issues and once to address issues that seem to be more universal. And follow-up actions are ongoing for both the Leadership Team and the Management Team. An entire segment of the last Management Team Meeting was devoted to improving internal customer service.

Some of the "products" you can expect in the next few months include: more Management Team involvement in the budget planning process; an internal customer-service rating process; a video addressing questions about promotions, training, grievances, EEO complaints, and other personnel issues; monthly opportunities for one-on-one phone sessions with members of the Leadership Team; greater use of the

Data General Info Center for administrative desk guides and other handy information; revamped electronic mailing lists; more frequent meetings between Project Leaders and Assistant Directors; visits by myself and other key headquarters personnel to all field locations to get more familiar with what's happening and what's bothering people "on the ground"; more emphasis on effective unit communications in performance ratings of supervisors; and a Station code of scientific ethics and a process for handling violations and disputes.

All-in-all, we're off to a good start in making the CIP work for us and are addressing the lion's share of CIP issues directly. There are a few issues, however, that reflect divergent thinking about how we should do business at the Station. The first issue has to do with the difference between "fairness" and "sameness" of treatment. If one employee needs training on a new piece of equipment, and the training involves a week-long course in San Francisco at a cost of \$2,000, fairness doesn't require that all other employees in the unit be guaranteed the same \$2,000 in training. Fairness only requires that all employees get the amount of training, at whatever cost is reasonable and affordable, that they need to do their jobs effectively.

The second issue has to do with the difference between participatory management and democracy. Participatory management happens when leaders make an honest effort to seek and consider the thoughts, ideas, and feelings of employees before making a decision. It does not mean that they relinquish responsibility for creativity or decision-making. A good example is the establishment of Transition Planning teams in preparation of the Southern-Southeastern Station consolidation. The intent of the Leadership Team was to get the best ideas of the employees who would be affected by the consolidation and to use those ideas in developing a new operational and organizational framework. We approved a vast majority of the recommendations from the Finance, Public Affairs, Policy, Physical Resources, and Information Management Teams. The goal organization that we developed had elements of all the alternative models prepared by the Restructuring Team. But at no time did any of the teams bear the responsibility for final decisions on the policies, practices, or structures to be adopted.

The final issue has to do with the field representation on the Leadership Team. Now that we are all located in Asheville, the Leadership Team meets briefly (and informally) every morning, except for Mondays when we schedule an afternoon meeting (with agenda). As issues emerge, we resolve them either at the afternoon or morning meetings. Chairs are open to any three employees who want to attend, and we encourage each of you to make time for a Leadership Team meeting during upcoming visits to headquarters. However, appointing three permanent members from the field would reduce their productivity by as much as 20 percent--in my mind, too heavy a burden for their research units. I hope that the other changes we are making will eliminate the perceived need for permanent field representatives. If they don't, we'll revisit the issue during the next CIP cycle.

It's hard to believe but that cycle starts this Spring as we conduct the second survey. The information from the first survey has been an extremely valuable vehicle for communicating and resolving problems at all levels of the Station. I urge each of you to participate fully and honestly in both the survey and the follow-up sessions with your supervisor and colleagues to develop action plans. For those who feared reprisals, I trust that our responses to last year's survey have laid your fears to rest. If not, let's talk.



PETER J. ROUSSOPOULOS  
Station Director

## Interior Secretary Babbitt Visits Coweeta

Secretary of Interior, Bruce Babbitt, visited Coweeta on Saturday, October 5, 1996. Mr. Babbitt was accompanied to Coweeta by Dr. Ron Pulliam, Director of the National Biological Survey (who arranged this brief trip to the Southeast) and Drs. D.A. Crossley and Judy Meyer. Topics covered in the introduction included the research history of Coweeta; Forest Service research structure, Research Work Unit (RWU) mission, research problems, and linkages with user groups, partnerships with National Forests, and university collaboration with an emphasis on the Long-Term Ecological Research (LTER) program. Our first field trip stop was the climatic station to discuss atmospheric chemistry and long-term trends. Other stops involved discussions of effects of management on biogeochemical cycles, hydrology, stream processes, vegetation dynamics, stream litter exclusion, and riparian zone experiments. After lunch we reviewed water-yield and water-quality studies and forest succession and environmental assessment modeling. Other topics discussed with Mr. Babbitt were ecosystem management, the role of fire and prescribed burning in forest ecosystems, Man

and Biosphere Program (Biosphere Reserves), and the Southern Appalachian Assessment. Mr. Babbitt and Ron departed for the Asheville Airport at 1445. The previous afternoon, Mr. Babbitt visited the Institute of Ecology at the University of Georgia and held discussions with students and faculty. Secretary Babbitt was complimentary of our research efforts and appreciative of the opportunity to visit this area. In fact, he stated that he would like to visit again.



Pictured left to right: Ron Pulliam, Judy Meyer, Bruce Babbitt, and Wayne Swank.

## Recent Web Site Activity

In the two months since the RTP Lab's web site began hosting the Southern Research Station's web pages, the server has received 13,561 "hits" (web pages and graphics) from interested web surfers. Requests for web pages have come from 571 different university, company, internet service provider, or other addresses spanning 18 countries from Finland to Peru, to Israel to Singapore. Slightly more than one-fifth came from educational institutions, another fifth from commercial accounts, and most of the remainder from either internet service providers or unknown domains. Surprisingly few, less than 25, were from government (.gov) or organization (.org) domains.

So, what did they come for? The largest share of requests were for the Station's newly launched pages. The web server is also hosting pages for the 9th Biennial Southern Silviculture Research Conference held February 25-27, and these pages received about 700 hits. The remainder of the requests went to pages describing the RTP Lab in general and the Economics Unit in particular. The Economics Unit first launched the RTP web site in October and runs the server for the Lab. The Station asked to run its pages here until their web server is installed in Asheville.

Which pages were the most popular? The web server logs report hits for each of the Station's new pages. Hit counts for selected files (or files in directories) are:

rwus.htm	367
onlinpub.htm	182
libserv.htm	134
othsites.htm	97
rwusites/ (directory)	421
newletr/ (directory)	167

Those wishing to visit the web site should enter the following URL in the location field of their web browser:

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

Alternatively, you can reach the RTP Lab and Station portions of the site from the Forest Service's main web site at:

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

## Chief's Honor Awards

Congratulations to Southern Research Station employees who were selected to receive the Chief's Honor Awards. They are Richard Hemingway, Ken Stolte, David Cleaves, Ivory Walker, and the members of the Southern Appalachian Assessment Team.

This is an honor for the recipients and the Station, and reflects well on the excellent work of the awardees. These awards will be presented at the spring National Leadership Conference on Thursday, April 10, 1997, in Washington, D.C.

Hemingway's award for "Superior Science" is for outstanding leadership in understanding the chemistry and significance of secondary plant metabolites, particularly tannins, and utilizing an international team of collaborators in the process.

Stolte's "International Forestry Award" is for his "extending the Forest Service mission globally by exporting Forest Health Monitoring technology that helps other countries manage for sustainable forests."

Cleave's "Excellence in Technology Transfer Award" is for his work in developing a protocol integrating decision science principles to Forest Service environmental analysis and decision processes.

Walker received the "Multicultural Organization Award" for his activities in the Asheville/Buncombe County community and for his active representation of African Americans at the Station.

The recipients of the "Ecosystem Management Award" are members of the Southern Appalachian Assessment Tea, who come from both the Southern Region and the Southern Research Station. This project was successful partly because of the strong relationships between the Region and the Station and the equally strong partnerships with other agencies, organizations, and the public.

## Alexander Clark, III Receives Research Award of Excellence

Alex Clark of Athens was presented the Society of American Forester's Award of Excellence for Research. Alex was recognized for his outstanding research activities which have made significant contributions to forestry in the Southeast.

Active in the dissemination of his research findings, Alex has made 94 presentations to various scientific and professional societies. He has also published 131 articles and publications on his research for the Forest Service, Forest Products Journal, Wood Science, Georgia Forestry Commission, Southern Forest Biomass Workshop, and others. In addition, Alex has developed the Total Tree Multi-product Cruise Program for IBM compatible computers.

An active member of the Society of America Foresters and Forest Products Society, Alex has served as Chairman, Secretary, and

Trustee--SE Section of the Forest Products Society. Alexander has received a Certificate of Merit from the USDA six times for his research and cruise program development.

## FIDR Award Winner

We are proud to announce that the winner of the 1996 FIDR Award for Research Excellence is the team of Jane Hayes, Lary Roton, and Brian Strom from the Southern Research Station. They were selected in recognition of creative research and patenting of the repellent properties and use of 4-allylanisole in protection of pines from the southern pine beetle. Our congratulations go out to not only Jane, Lary, and Brian, but also to all the nominees for this year's award. There was such a high level of excellence in the research done by all the nominees that the selection of only one recipient was difficult. This award includes a plaque and \$10,000 for use by Jane's project on any work-related project or activity, such as equipment, temporary help, travel, or meeting attendance.

## Wildlife Society Southeast Publication Award

Three SRS employees, James G. Dickson, J. Howard Williamson, and Richard Conner recently received the Wildlife Society-Southeast Section Award for their publication entitled "Longevity and bird use of hardwood snags created by herbicides." The authors have advanced management of southern wildlife and forest ecosystems through information produced for their long-term research. They have defined forest habitat for bird communities and species of special interest in different forest stands and assessed how natural disturbance and man-related manipulations affect bird and other vertebrate communities. Also, they have developed information on snag and cavity suitability for cavity nesting birds and developed techniques for producing snags for cavity using wildlife. They have received a number of awards for their long-term research.

## CFC Challenge Exceeded--Pete Shaves

The Station's Combined Federal Campaign for 1996 kicked off in September of last year. The Director, Pete Roussopoulos, issued a challenge to Station employees. If the 1995 goal was exceeded, he promised to shave his mustache. Pete also contributed 75th anniversary coffee mugs to the first 10 people who contributed \$100 or more. By the end of the campaign, we had exceeded our goal and received a Gold Award for increasing 95 contributions by 20.7%. We also received a Silver Award for exceeding an average of \$70 per employee. On January 21, just before a Green Team meeting, Pete kept his word and shaved his mustache at a family meeting.



*Director shaves mustache*

## **The Escambia Experimental Forest Marks 50 Years of Research on the Ecology and Management of Longleaf Pine**

The Escambia Experimental Forest was formally established on April 1, 1947, when the T.R. Miller Mill Company of Brewton, AL, provided land, at no cost, to the USDA Forest Service through a 99-year lease. This 3,000-acre tract in southwest Alabama was selected as typical of second-growth longleaf pine forests that, at the time, covered about 6.2 million acres in south Alabama and northwest Florida.

The 50th anniversary of this research partnership comes at a time of rising concern about the continuing regionwide decline of longleaf pine ecosystems. Less than 3 million acres remain of the estimated 92 million acres dominated by this species in presettlement times. The rich cultural tradition and ecological values associated with the longleaf ecosystem, coupled with the species' adaptability to a wide range of management objectives, make longleaf pine a suitable choice for many landowners in the South, especially when utilizing low-cost natural regeneration strategies and relatively long rotations. Today the Escambia Experimental Forest constitutes a unique example of longleaf pine ecosystems in all stages of development. The combinations of stand ages, sites, and conditions found here exist nowhere else. The forest supports continuing long-term research studies and management demonstrations.

Work on the Escambia has provided information for 160 publications. Uncounted other reports have used data from the Escambia. The long-term silvicultural and fire ecology study sites provide living laboratories available to other researchers working to unravel some of the many fascinating mysteries lurking within what was once one of the most extensive forest ecosystems in North America. Long-term research, often difficult to retain, is once again proving to be both an ecologically and financially wise investment. The forest is managed by RWU-4105 located on the campus of Auburn University, Auburn, AL. For more information contact Project Leader Charles McMahon or Research Forester Dr. Bill Boyer in Auburn (334-826-8700). Day to day operations on the forest are managed by Forest Superintendent George Ward with part-time assistance from Bill Thompson.

## **The National Survey on Recreation and the Environment--NSRE**

The 1994-95 National Survey on Recreation and the Environment is the latest in a series of National Recreation Surveys conducted by the Federal Government since the first one was done for the Outdoor Recreation Resources Review Commission in 1960. This latest National Survey was an inter-agency and private sector partnership. Sponsors were the Forest Service, Bureau of Land Management, Sporting Goods Manufacturers Association, Army Corps of Engineers, Environmental Protection Agency, Economic Research Service, National Park Service, and National Oceanic and Atmospheric Administration. Within the Forest Service, funding and technical support was provided by Research; Resources Program and Assessment (RPA); Recreation, Heritage and Wilderness; Wildlife, Fish, and Rare Plants; and the Southern Research Station and Rocky Mountain Experiment Station. Comparability in activity participation, favorite activities, constraints and demographics were maintained for comparison with surveys done in 1960, 1965, and 1982-83. Forest Service Research assumed the lead role in this project because of its on-going work in doing the outdoor recreation and wilderness assessment for RPA. The contents of the survey include activity participation, accessibility, favorite activities, constraints, wildlife values, wilderness attitudes, management and policy issues, trip profiles, and demographics. Approximately 17,000 individuals 16 years and older were surveyed in quarterly samples between January 1994 and April 1995. Reports will be available in winter/spring of 1997. For further information contact Ken Cordell of the Southern Research Station in Athens GA at: K.Cordell:S33L01A.

## Coop Agreement Developed Competitively

The Center for Forested Wetlands Research (SRS 4103) recently conducted a competition for cooperative research, and the experience was very positive. The Center staff developed the basic project framework for the wildlife-related project in conjunction with forest management staff on the Savannah River Forest Station. That framework then provided the basis for soliciting a prospectus on proposed research from university faculty. Three universities were notified, and two responded. The selection was based on the quality of the prospectus, budget, and qualifications of the cooperating faculty and students. The procedure worked well in establishing a strong foundation for the cooperative research and program support. This was the first Coop Agreement that we have developed competitively, and I anticipate that this approach will be used more in the future. This approach can be effective for projects where a cooperator is needed to fill a project niche and provide new ideas for an approach or to challenge for cooperator support for the project.

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## Trettin Produces a New Volume on Forested Wetlands

Carl Trettin is senior editor for a new book published by CRC Press, Inc., entitled "Ecology and Management: Northern Forested Wetlands." The volume contains a synthesis of the current state of knowledge about the ecology and management of northern forested wetlands around the world. Authors from eight countries contributed chapters to the volume under the major topics of Ecology, Hydrology and Biogeochemistry, and Management. Working on the volume with Carl were Prof. Jurgensen and Dr. Gale, from Michigan Technological University, Prof. Grigal from University of Minnesota, and Prof. Jeglum from the Swedish Agricultural University.



## The Southern Urban Forestry Technical Service Center: Taking Research to the Field

Did you know that several research projects in the Southern Station have application potential in urban environments, such as dogwood anthracnose, ecological restoration, vegetation management impact on stream flow and quality, watersheds, wood utilization, soil productivity, recreation and community development, road construction and erosion, and southern pine beetle? One goal of the Southern Urban Forestry Technical Service Center (SUFTSC) is to take research information that applies to urban environments and share it with urban foresters, urban natural resource professionals, state forestry agencies, local governments, non-profit organizations, nurseries, researchers, consultants, and others.

The SUFTSC was created by the Southern Station and Southern Region as a way to reach out to constituents in cities, suburbs, urban interface areas, and expanding rural communities. The SUFTSC provides the following services:

- Clearinghouse for urban forestry information
- Technical assistance
- Technology transfer activities and products
- Workshops and conferences

One of the main benefits of the SUFTSC is that it facilitates the exchange of urban forestry information, which encourages partnerships, reduces the duplication of efforts, and maximizes the use of limited resources.

If you are aware of or are conducting research that might apply in urban environments, please contact the SUFTSC. The SUFTSC is one vehicle that researchers can use to get their research results out to the field. We hope to hear from you soon.

Ed Macie	Ingrid Sather
USDA Forest Service	USDA Forest Service
SUFTSC	SUFTSC
1720 Peachtree Rd, NW	320 Green Street
Room 811N	Athens, GA 30602-2044
Atlanta, GA 30367	Phone 706/546-3203
Phone 404/347-1647	

## Emeritus Scientist Recipients

**Dr. Peter L. Lorio, Jr.**, has served as a research scientist in the Forest Insect Research Project located at Pineville, LA, for more than 30 years. Pete has been recognized nationally and internationally as a leader in the area of insect-host-site relationships. Pete also pioneered work on Southern Pine Beetle stand risk rating and adapted it for routine use on the national forests in the Southern Region. Pete's recent work on plant growth-differentiation balance and its application to pine/bark beetle interactions may represent some of the most original thinking about host susceptibility. His Forest Service career has been distinguished by participation in and unique contributions to multidisciplinary research units which emphasized understanding and development of pest management strategies. Pete is an outstanding scientist, who has given unselfishly to his profession, and we offer our congratulations.

During a 30-year career with the USDA Forest Service, **Dr. Thomas Miller** was an active member and leader in the forest pathology community as well as the forestry in the South. Tom's primary interest has been and remains the investigation of fusiform rust, and his studies have focused on methods of evaluation and on its impact and management of the southern forests. Tom's research studies on the collection and storage of basidiospores of *Cronartium fusiforme* and later work on evaluation of fusiform rust symptom types and resistance in southern pine seedlings were instrumental in the development and success of the Fusiform Rust Testing Center in Asheville, NC. Other research conducted by Tom in support of the fusiform rust issues have included studies on the relationships between rust hazard ratings and fusiform rust incidence, the biologic and economic feasibility

of salvage/thinning operations in fusiform rust infected stands, and spatial and temporal studies of fusiform rust in southern pines as influenced by site factors. In 1980, Tom helped found the Integrated Forest Pest Management (IFPM) Cooperative at the University of Florida. This cooperative, composed of members from forest industry and States in the South, has actively pursued pest management issues pertinent to southern forestry. In 1989, Tom assisted in establishing the Partnership from Fundamental Research in Forest Biology at the same university. Retiring in 1992, Tom remains active in both the IFPM Cooperative and the Forest Biology Partnership as an advisor and research investigator. He continues to work and share his expertise. Congratulations Tom!



### New Research Entomologist/Molecular Biologist at Stoneville

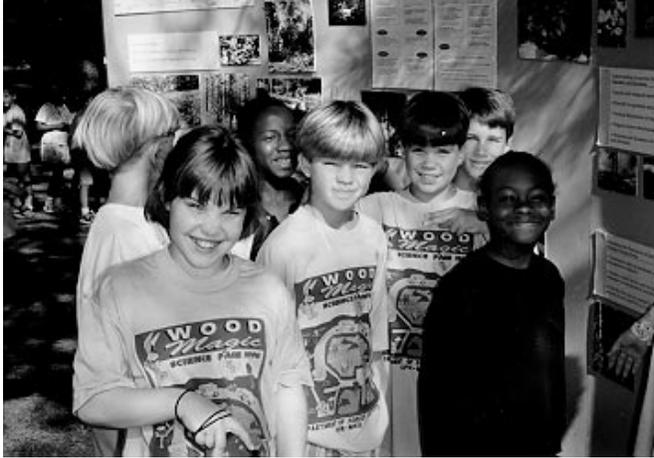
Nathan M. Schiff has come to Stoneville after 5 years as a research entomologist/molecular biologist at Beltsville, MD, and Albany, CA, where he studied insect population genetics. His areas of expertise include insect systematics, caterpillar feeding behavior, Africanized honey bees, sawflies, and molecular methods in entomology. At Stoneville, he will conduct research on insect pests of bottomland hardwoods and insect biodiversity in the Mississippi Delta and the South.

Originally from the North, he received a B.A. in Biology from UCLA, and M.S. and Ph.D. degrees of Entomology from the Universities of Arizona and Illinois, respectively. He has studied forest insects all over the United States and on several expeditions to the New World tropics, penninsular Malaysia, and Borneo.



*Nathan Schiff holds a baby sloth encountered on the Amazon in Peru.*

## RWUs Celebrate Station's 75th Anniversary



*Fair participants enjoy the SRS display*

Southern Research Station employees in Starkville, MS, celebrated the Station's 75th Anniversary in conjunction with the Wood Magic Science Fair held at the Mississippi State University Forest Products Laboratory. During the week of October 14, 1996, a total of 7,400 third and fourth grade students, teachers, and parents from throughout the State attended the fair. Forest Service participation was evident throughout the fair with employees from three research units (RWU-4502, RWU-4801, and RWU-4152) assisting with various events. The program emphasized math skills, foreign languages, computer skills, scientific experiments, biology, reasons for recycling, conservation of natural resources, and the importance of the wood products industry.

The Station poster was on display near the beginning of the walking tour. Participants returned home to their families with Smokey Bear memorabilia and an announcement of the 75th Anniversary. An invitation was extended to visit the Mississippi projects. The Tombighee NFS group in Ackeran, MS, also participated and brought Smokey Bear.

Presenters of the fair are confident that the seeds of future careers were planted in many young minds that week.

The George W. Andrews Forestry Science Laboratory at Auburn University in Alabama celebrated the 75th anniversary of the Southern Research Station on November 25, 1996. The employees of both research units (RWU-4703 and RWU-4105) joined together for two special events: a collaborative luncheon and an Open House. An article was published in the local newspaper and the university newsletter about the Station and the research being conducted in Auburn.

Many of the employees prepared and participated in the Open House. Displays, exhibits, hands-on activities, and tours were part of the Open House. Several visitors from Auburn University as well as the local community joined in the event.

### ***Celebrating Wildflowers***

Celebrating wildflowers is a collaborative commemoration between the USDA Forest Service, Bureau of Land Management, USDI Fish and Wildlife Service, and USDI National Park Service. Its purpose is to promote the importance of conservation and management of native plants and plant habitats, emphasizing the esthetic, recreational, biological, medicinal, and economic values of wildflowers.

National Wildflower Week, which takes place in May, is an annual event. To find out about events on the Nation's public land in celebrating wildflowers call:

***Wild Hot Line***  
***1-800-354-4595***  
***April through July***



## Southern Annual Forest Inventory System (SAFIS)

SAFIS is a shift in philosophy in the way forest inventories are done in the South. Partnerships have been formed between the Forest Service, State Foresters, industry, universities, and others to collaborate on forest inventories. It is a continuous annual inventory that systematically measures a percentage of the Forest Inventory and Analysis (FIA) plots each year and provides for a uniform set of confidence intervals on the resource estimates. Normally, inventories are done on a State-by-State basis, with two States in the South having current-year data. The current mode of operation means that many States' inventory data are up to 10 years (or more) old. The implementation of SAFIS will mean that all States will have some data taken every year. Thus, at least some inventory data will be current for each State, although the completion of all FIA plots within a particular State may take 5-10 years to complete, depending on resources available.

The current system of forest inventory takes about 10 to 15 years to complete a cycle. Thus, the data are very accurate for a year or two but then become very unreliable, especially after about 3 to 4 years. This also leads to survey data that are disjointed in time across State boundaries. With the rapid changes occurring in the South, reliable forest resource information is needed on an annual basis. It is critical that catastrophic events such as hurricanes, changes in use such as the wildland/urban interface, and balance of growth to harvest be monitored. Timeliness of survey data was identified as one of the key issues in the 1992 "Report of the Blue Ribbon Panel on FIA," a joint university/industry/ governmental committee that was formed to assess FIA needs. SAFIS provides a method for providing reliable annual estimates critical to effectively managing the forest resources of the South.

A SAFIS information and coordination meeting was held in Macon, GA, on February 4-5, 1997.

Eighty-seven people from the USDA Forest Service, States, industry, and universities attended the two day meeting.

### Interactive GIS Retrieval System

This system operates within Windows 3.1 or Windows 95 operating systems. The system includes a stand-alone GIS and database management system that allows the user to query data from the Eastwide database files and display this data spatially. The user has the option to refine the query or build a new query using spatial tools that include geographic, radius, and polygon methods. Maps may be composed from either internal data or external spreadsheet formatted data. From the queries, tabular output may be generated, and data may be exported for use in external databases and spreadsheets. The system will be distributed through four mediums: CD-ROM, zip disk, Internet, and floppy diskettes. Geographic data, such as boundaries, roads, streams, and water bodies, will reside on CD-ROM. Forest Inventory data, which is updated periodically, will be available for downloading from the Internet and will be available on CD-ROM at the completion of a State. The main program and system support files will be available on CD-ROM or zip disk at the completion of a state. The main program and system support files will be available on the Internet and distributed on floppy diskettes or zip disks because the program is continually undergoing updates. Geographical data used by the system is currently being geocoded at the State level. As States are completed, they will be available for distribution. The following States are completed: Alabama, Florida, Georgia, and South Carolina. The following States are currently being geocoded: North Carolina, Louisiana, and Kentucky. The contact in Asheville is Larry Royer.



## Fusiform Rust Resistant Pine Research Comes to Fruition

The long-term cooperative project between the USDA Forest Service and the Georgia Forestry Commission to produce disease resistant slash and loblolly pines is now paying big dividends. This program was designed to develop southern pines highly resistant to fusiform rust--the major disease of these commercial species. The research work began almost 30 years ago, under the direction of Dr. Harry Powers, a forest pathologist with the (then) Southeastern Forest Experiment Station (now, the Southern Research Station).

The first seed production in limited quantities began in 1990 and has steadily increased so that the 1996 seed crop was sufficient to produce 9 million seedlings. These seedlings are sold primarily to small landowners who have not been able to obtain disease resistant seedlings before this time. All available seedlings are sold out long before planting season. The eventual production from the 85-acre orchard should reach the level of approximately 15 million seedlings per year. This year's crop of 1.0 seedlings, which will be lifted for planting this fall, was sold for \$36 per 1,000.

While seedlings are not sold to large pulp and paper companies, material for grafting and controlled pollination has been shared with several companies. The orchard, operated by the Georgia Forestry Commission, is also providing material for research into the genes that provide resistance.

The overall objective of the research project was to establish a pine seed orchard that would produce high-quality seeds for growing pine seedlings with both rust resistance and excellent growth and yield characteristics. All of the pine families used to establish the orchard were intensively tested by artificial inoculations with the rust fungus. Orchard trees were also checked at least yearly so that any trees showing field symptoms of rust could be removed from the orchard. Trees were also evaluated for growth and form so that the eventual crop trees would not only be highly disease resistant but also very productive.

This program is an excellent example of the type of results that can be achieved by cooperative efforts between the Federal and State governments with a long-term commitment to research.

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## A Land Manager's Guide to Point Counts of Birds in the Southeast

Paul Hamel, lead author of *A Land Manager's Guide to Point Counts of Birds in the Southeast*, considers this publication's most important role as a way to affect land managers in a positive way. Hamel, a research wildlife biologist at the Southern Hardwoods Laboratory in Stoneville, MS, says, "The more understanding that people on the ground have, at the time that they do their work, the more effective we will be in managing our natural resources. The most important land managers we have are the

people who are out there spraying paint and cutting timber--the more they understand how their work interrelates with other resources, the better chance we'll have to produce the mix of resources we want." Paul Hamel combines his passion for birds with scientific research. He compares the normal lives of birds to the plight of the homeless: "They're looking for the warmest place out of the wind, the driest place out of the rain, and the closest place to food-- and birds are doing all this at 20 miles per hour, while avoiding predators."

Hamel's latest publication has struck a chord with land managers across the country. Dave Krueper at the Bureau of Land Management in Arizona requested copies to train field personnel in bird point count techniques. Krueper says, "In my opinion, this is one of the best publications to come out in the past few years under the Partners in Flight (PIF) umbrella program. It also applies to all other regions of the United States, and could have been titled *A Land Manager's Guide to Point Counts of North American Birds!*" Distribution to natural resource collaborators and participants in Partners in Flight put this concise technology transfer tool in the hands of hundreds of natural resource managers and field personnel. The Station is already ordering a second printing of *A Land Manager's Guide to Point Counts of Birds in the Southeast* and anticipates heavy demand into the future.

Hamel's co-authors represent a wide array of partners focused on natural resources: Winston Paul

(cont.)

Smith, formerly of the Southern Forest Experiment Station, is a research wildlife biologist at the Pacific Northwest Research Station; Smith works on the Tongass Land Management Team. Daniel J. Twedt is wildlife biologist with the Biological Resources Division of the US Geological Survey in Vicksburg, MS. James R. Woehr is senior scientist at the Wildlife Management Institute, Washington, DC. Eddie Morris was wildlife biologist and is now forest fire and avian management officer at the Chattahoochee-Oconee National Forests, Gainesville, GA. Robert B. Hamilton is associate professor at Louisiana State University, Baton Rouge, LA; and Robert J. Cooper, an assistant professor at the University of Memphis in Memphis, TN, will soon assume similar duties at the University of Georgia in Athens, GA.

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## Marketing the Southern Research Station

Raising the awareness of Forest Service Research in the South mixes well with public interest in natural resources, both from consumptive and non-consumptive aspects. As the Nation focuses on the South as a desirable place to live, work, and recreate, the region's diverse forests also attract timber companies and forest consultants, outdoor enthusiasts and entrepreneurs marketing trails, streams, and access to wildlife. The Station's strategic plan features the issues of measuring and monitoring forest resources; understanding ecosystem structure, function, and process; and sustainability and enhanced environmental quality and productivity. The Communications Office is telling other land managers, scientists, students, and the general public how our research relates to our environment, economy, and sustained growth.

Demand for the Station's publications resulted in over 14,500 orders filled through the December 1996 catalogue. Claire Payne, technical information specialist, and Mercedes Rios-Young, public affairs assistant, publish a quarterly listing of all Station periodicals and journal articles authored by SRS scientists. That catalogue will now go to RWU's and retirees; the Station newsletter will not list publications. Domestic customers who recently asked to be kept on the mailing list total more than 3,500.

Customers also request publications by telephone, fax, letter, and Forest Service and Station home pages. Several research work units maintain home pages, including Phil Araman's Primary Hardwood Processing and Products unit in Blacksburg, VA, Forest Inventory and Analysis group in Starkville, MS, and the group in RTP, NC.

Claire Payne has written press releases featuring publications on eastern old-growth forest types, the recovery of the red-cockaded woodpecker, Jim Solomon's guide to hardwood insect borers, and the effects of air pollution on southern pine forests. News releases reach the Forest Service network and media outlets in strategic geographic areas. The publicity of Solomon's *Guide to Insect Borers of North American Broadleaf Trees and Shrubs* (Agricultural Handbook 706) resulted in its being announced in the publication *Hortideas*; hundreds of master gardeners received copies distributed by the Station.

Melissa Carlson has joined the Southern Research Station (SRS) as a "Marketing and Customer Service Specialist." She will be developing an overall marketing strategy relating to the Station's programs. Adapting marketing principles to the public sector involves identifying target audiences, determining their needs and interests, and matching those up with the capabilities of the service agency. A traditional definition of "marketing" defines it as "a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others." "Marketing focuses on the needs of the buyer--selling focuses on the needs of the seller." Melissa is currently working on the communications strategy and support materials to inform our customers about our on-going Strategic Science Planning effort. Her goal will be to increase our customer base and to strengthen understanding and support within the Forest Service and with our customers.



**Best Sellers**

SRS scientists can claim best sellers status for their publications about unevenaged silviculture and management practices, neotropical migratory birds, and the wide range of topics addressed at the Eighth Biennial Southern Silvicultural Research Conference. During the month of January, almost 11,000 publications advertised in the December 1996 *Recent Publications of the Southern Research Station* reached our customers. During this same time, an article in the Society of American Foresters' *The Forestry Source* promoted *Uneven-aged Silviculture for the Loblolly and Shortleaf Pine Forest Cover Types* (General Technical Report SO-118). We are adding to our customer base and providing valuable information thanks to this report written by Jim Baker, Mike Cain, Jim Guldin, Paul Murphy, and Mike Shelton.

The Station is building a profile of its customers who request publications from the quarterly catalogue. Individuals can mark the categories listed on the response card: Forest Service; other Federal agencies; State agency; non-government organization; forest consultant; non-industrial private landowner; industry; other user of forest resources; university; and international. Although some customers chose to not categorize themselves, most participated. In January, State agency professionals, university professors and students, forest consultants, and industry representatives ranked highest. March catalogue request cards are pouring in, so we are eager to find out who our customers are this quarter and what publications they want--technology transfer can be quite rewarding, even from a distance!

December catalogue #	Total pubs mailed	December catalogue #	Total pubs mailed
1	47	40	149
2	50	41	222
3	85	42	47
4	705	43	147
5	340	44	22
6	138	45	25
7	114	46	236
8	178	47	149
9	250	48	85
10	250	49	78
11	202	50	38
12	348	51	352
13	65	52	270
14	145	53	214
15	46	54	126
16	339	55	57
17	513	56	59
18	123	57	42
19	142	58	255
20	55	59	391
21	80	60	444
22	342	61	72
23	582	62	47
24	146	63	39
25	178	64	106
26	177	65	124
27	694	66	105
28	93	67	161
29	43	68	69
30	105	69	259
31	205	70	199
32	309	71	170
33	274	72	216
34	212	73	278
35	130	74	299
36	248	75	84
37	134	76	107
38	127	77	82
39	261	78	16

Listings in the catalogue are numbered consecutively for ease in filling orders. Copies of the *Recent Publications of the Southern Research Station* catalogue were mailed to each RWU at the end of March. To order additional catalogues, contact Claire Payne at (704) 257-4392 or C.Payne:S33A.

## **Employees Receiving Performance Awards in FY 96**

**ATHENS** - Tony Blalock, James Bowker, David Bramlett, Kerry Britton, Erwin Chambliss, Alexander Clark, David Combs, Ken Cordell, Gary DeBarr, Donald English, Jeffrey Fields, Charles Greer, James Hanula, Marilyn Howard, Mark Kates, Paul Kormanik, Todd Kuntz, Sharon Lumpkin, Richard Malcolm, James McMinn, Shela Mou, Wilborn O'Connell, Christine Overdevest, Arthur Phalo, Shi-Jun Sung, Decolar Terrell, Michael Thompson, Marilyn Vidmar, Linda Watson, Carol Williams.

**AUBURN** - Roger Best, William Boyer, Emily Carter, Juanita Crawford, James Cunningham, James Dowdell, Joseph Fischer, Hilliard Gibbs, Johnny Grace III, Janice Jordan, John Klepac, Timothy McDonald, Charles McMahan, Jerry Michael, James Miller, Charles Mitchell, Robert Rummer, Walter Smith, Preston Steele, Bryce Stokes, William Thompson, Fran Tucker, Ronald Tucker, George Ward.

**BENT CREEK** - Erik Berg, Cathryn Greenburg, Tracy Hargrave, Tom Lloyd, William McNab, Julia Murphy, Harald Rauscher.

**BLACKSBURG** - Phil Araman, C. Andrew Dolloff, Pat Flebbe, Holly Jennings, Kevin Leftwich, A. Dennis Lemly, Robin Stidham, Martin Underwood, Matthew Winn.

**CHARLESTON** - Marianne Burke, Mark Eisenbies, David Tompkins, Carl Trettin.

**COWEETA** - Katherine Elliott, Jennifer Knoepp, Wayne Swank, James Vose.

**FIA** - James Rosson

**HEADQUARTERS** - Yvette Ayala, Judy Allen, Cynthia Arnette, Phil Bailey, Mary Benally, Bonnie Berry, Pamela Bowman, B.R. Boyd, Sandra Bryson, Byron Brown, Louise Brown, William Burkman, Mary Chipman, Diana Corbin, Virginia Creekmur, Noel Cost, Donald Downs, Venessa Duncan, Glenda Dyer, Carmen Everton, Carroll Farmer, Carol Ferguson, Thelma Floyd, George Foster, Margaret Gallagher, Louise Gittens, Gertie Griffin, Nell Godfrey, Allan Hall, Kathy Hart, Nancy Herbert, Constance Jackson, John Kelly, Laura Lipe, Janice Lowe, James Mayo, Nancy Meadows, Bev McFarland, Donna McHone, Shelly McMillan, Barry Miller, Marsha Conely-Miller, James Morrow, Jo Padgett, Bernard Parresol, Claire Payne, Katherine Plym, Kelly Radford, Jimmy Reaves, Kathy Ricker, Jean Sanders, Gerald Selig, Holly Selig, Robert Sikes, Michael Walker, Alan Wagner, Walter Watts, Judy Womble, Mercedes Rios-Young, Stanley Zarnoch, John Zgavec.

**MACON** - Patsy Moss

**MONTICELLO** - James Baker, Michael Cain, Michael Chain, Richard Chaney, Jimmy Jones, Kenny King, Rose Moore, Paul Murphy, Jacqueline Robinson, Michael Shelton, Kirby Sneed, Mildred Tilley, James Whiteside.

**NACOGDOCHES** - Raymond Brown, Rodney Buford, Shirley Burgdorf, Richard Conner, James Dickson, Myrna Johnson, Nancy Koerth, Roger Perry, D. Craig Rudolph, Daniel Saenz, Clifford Shackelford, Ron Thill, James Williamson.

**NEW ORLEANS** - Rodney Busby, David Cleaves, James Granskog, John Greene, Denise Hutchinson, Joan Norman, Michael Persica, Minnie Thompson, Sarah Warren, Ada Whitfield.

**PINEVILLE** - Curtis Andries, James Barnett, Jane Hayes, Kier Klepzig, Daniel Leduc, John Reeve.

**RTP** - Robbie Barham, Jean Beck, Judy Binns, Marilyn Buford, Thomas Christensen, Valerie Cooper, Rosa Crews, Ed DeSteiguer, Robert Eaton, Susan Fox, Thomas Holmes, Sandra Kelly, Christine King, Robert Loomis, Kim Ludovici, Christopher Maier, Evan Mercer, William Otrosina, Jeffrey Piestemon, John Pye, Eric Rhodenbaugh, James Richmond, Diane Riggsbee, Felipe Sanchez, Karen Sarsony, William Smith, Ken Stolte, Anthony Sutton, David Wear.

**SAUCIER** - Robert Doudrick.

**STARKVILLE** - Peggy Bell, Joel Etheridge, Travis Greer, Marvin Johnston, Eldon Mallette, Janine Powell.

**STONEVILLE** - Lynne Breland, K.P. Caraway, Dennis Carlson, Betty Clark, K.F. Conner, Emile Gardiner, Wendell Haag, Theodor Leininger, Daniel Marion, Billy McDonnieal, Frances McEwen, John McWhirter, James Meadows, Calvin Meier, John Stanturf, Melvin Warren, Harold Warshaw, D. Webber, Keith Willis.

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## **Employees Receiving Extra Effort Awards in FY 96**

**ATHENS** - Edward Andrews, Larry Broome, Cassandra Johnson, Gwen Jones, Jennie Parham.

**BLACKSBURG** - Daniel Schmoldt.

**CHARLESTON** - Cynthia Bunton, Mark Eisenbies, Roman Powers, Michelle Wrenn.

**COWEETA** - Cindi Brown, Barton Clinton, Patsy Clinton, Mark Crawford, Katherine Elliott, Jennifer Knoepp, Robert Long, Robert McCollum, Billy McCoy, Julia Moore, Teresa Moss, Kyle Payne, Christine Sobek, Patricia Stickney, Lloyd Swift, James Vose.

**FIA** - Susan Bowman, Donna Burnett, Anne Jenkins, Sharon Johnson, Tony Johnson, Ray Sheffield, Michael Thompson.

**HEADQUARTERS** - Vickie Brooks, Yvonne Briggs, Donna Burnett, Mary Chipman, Joan Cook, Cathy Deal, Carol Ferguson, Louise Gallagher, Jean Gay, Ted Green, Jim Holbrook, Laura Lipe, Janice Lowe, Charles Matthews, David Matthews, Nancy Meadows, Melody Mehaffy, Joan Norman, Kim Parks, Melba Queen, Richard Quick, Ivory Walker, Jan Walthall, Marie Willis.

**HUNTSVILLE** - Sandra Reed.

**JESSEVILLE** - Kenny King.

**MONTICELLO** - Jimmy Jones, Jesse Swafford.

**NEW ORLEANS** - Ruth Devall, Brian Doherty.

**NOLA** - David Cleaves.

**SAUCIER** - Thomas Kubisiak, Mary Mason.

**STARKVILLE** - Lance Asherin, Roger Boyer, Robert Claybrook, Lyndell Davidson, Deborah Ferguson, James Langford, Jeffrey Martin, Anthony Olsen, Mary Patrick, Leslie Prewitt, Janine Powell, Kenneth Reed, Jr., Brian Slagle, Jeffery Turner, Charlene Walker.

**STONEVILLE** - Lynne Breland.

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## Personnel Actions

In past issues, the personnel staff in Asheville supplied all *Personnel Actions*. However, with staff members doing "less with less," personnel is unable to continue this service. The newsletter editor extends a sincere thank you to personnel staff responsible for supplying previous *Personnel Actions*.

To highlight employees, the newsletter editor encourages each Station employee to submit personnel actions. These actions, sent directly to the newsletter editor, can include promotions, reassignment, resignations, retirements, and new employee highlights.

Employees have submitted the following:

## Promotions

Shawna Stone, Forestry Technician, Clemson, SC

John Grace III has recently been converted from an Engineering Student-Trainee to the position of Research Engineer with the Southern Research Station RWU-4703. Grace served as a coop student with RWU-4703 as an undergraduate and continued this appointment through graduate school. He is a recent graduate of Auburn University's Agricultural Engineering Graduate Program. His thesis work investigated "Surface Erosion Control on Newly Constructed Forest Roads." He will be conducting research on the impact of forest operations on ecosystems with focus in the area of forest roads.

The Southern Research Station Newsletter represents events and employee news from the research laboratories and administrative staffs in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia--the states that make up the Station's territory.

This newsletter is published by the USDA Forest Service, Southern Research Station, Public Affairs Office, P.O. Box 2680, 200 Weaver Boulevard, Asheville, NC 28802.

To submit newsworthy stories in future newsletters, send complete articles in hardcopy for or on disk to the address above. Photos are welcomed, preferably black and white.

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