



## Southern Global Change Program (SGCP) Scientists Conduct Carbon and Water Research in China

The standard of living of the Chinese people has greatly improved in the past two decades. Now China has the fastest growing economy in the world. However, this economic boom has resulted in serious environmental and ecological problems.

Air pollution, water shortages and pollution, soil erosion, and invasion of exotic species and a loss of biological diversity are just some of the most pressing problems facing this developing nation. Scientists at the Southern Global Change Program (SGCP) have been working closely with Chinese scientists in soil and water conservation research. The collaborative work involves adapting computer simulation models developed by U.S. scientists that assess current and future Chinese land use conditions, and test alternative management practices to minimize future land degradation.



SGCP scientist field trip to an aspen plantation site in Miyu reservoir basin near Beijing.

(continued on page 3)

## New Century of Service Project

### *Community connections*

Forest Service employees and retirees have a long history of being highly involved in the communities in which they live and work. In many of these communities, both small and large, Forest Service employees and retirees are the backbone of the volunteer labor force, serving as scout leaders, church leaders, volunteer firefighters, board members, PTA leaders, committee members, activity and event organizers, and in other community service roles. Particularly in smaller communities, Forest Service employees and retirees are often a disproportionately high percentage of the volunteer community. Communities greatly value these "outside of work" contributions.

When employees transfer or retire, it's not unusual for the communities' praise of the employee's volunteer service to exceed their praise of the employee's official contributions. The Forest Service is identifying exemplary examples of employees' and retirees' commitment to community service. This is one of several projects commemorating the Forest Service's 100-year anniversary in 2005 called a New Century of Service.

# In this issue:

**Page 2...  
From the  
editors**

**Page 2...  
Director's  
Awards**

**Page 3...  
Happy Birthday  
Smokey**

## From the editors . . .

Dear Reader,

We have come a long way from the first Southern Research Station newsletter, to now with the *Southern Aspect's* style, content, and look; we've received many appreciated compliments over the years. With the agency's reorganization of staff in order to complete the Forest Service mission, sometimes we must make hard decisions about ongoing projects, tasks, and programs. Here at the Station's Communications Office we are also going through changes with staff retiring, and the accompanying reorganization of staff.

The SRS Communications Office is committed to do what is best for the Station and the agency, and we value our reader's options and comments about the *Southern Aspect*. Because of changing priorities, and the increase in electronic communications, we are planning to phase out the *Southern Aspect* newsletter, and before we go any further we would like to hear from you, the reader. We are also asking those retirees who are "online" to please give us your email address so that we may keep in contact with you. You can send your comments to: [rcoates@fs.fed.us](mailto:rcoates@fs.fed.us) or:

*Southern Aspect*  
ATTN: Communications Office  
200 W.T. Weaver Blvd.  
P.O. Box 2680  
Asheville, NC 28804

## Charles David Biddix

Charles David Biddix, 75, of Asheville, died Thursday, June 24, 2004, at Mountain Area Hospice Solace Center.

A native of Black Mountain, he was the son of the late David Biddix and Maggie Allsion Biddix. He graduated from Black Mountain High School. He was a retired purchasing agent for the USDA Forest Service. He loved antiques and was a member of the Buncombe County Genealogical Society. He is survived by several nieces and nephews.

The graveside service was held in Mountain View Memorial Park with the Rev. Gerald Collins officiating. The family will greet friends following the service. In lieu of flowers memorial contributions may be made to Mountain Area Hospice, P.O. Box 25338, Asheville, NC 28813. Funeral arrangements are entrusted to Brigman's Funeral Service in Black Mountain. A guest book is available by visiting "Obituaries" at [www.brigmans.com](http://www.brigmans.com).

---

## Director's Awards for FIA Excellence

Southern Research Station award recipients are Bill Bechtold, Bill Smith, Greg Reams, and Frank Roesch for collaborating on the manuscript "*The Enhanced Forest Inventory and Analysis Program—National Sampling Design and Estimation Procedures*". This is FIA's first externally peer reviewed publication of nationally consistent sampling and estimation procedures.

## Southern Global Change Program

(continued from page 1)

This work has been funded by the USDA Forest Service International Research Program. Both SGCP scientists and students, and Chinese scientists trained at the SGCP research laboratory have benefited greatly from these academic exchanges. Recently, SGCP scientists Steven McNulty, Ge Sun, and Michael Gavazzi traveled to China and helped to initiate a U.S.-China Carbon Consortium (USCCC). The main goal of USCCC that is co-chaired by Drs McNulty and Han (of the Chinese Academy of Science) is to quantify carbon and water cycles of managed ecosystems across multiple gradients in climate and landscape and examine how climate and land use changes control carbon sequestration and hydrology.

Forests have the ability to draw carbon from the atmosphere through tree growth. It is widely believed that global warming can be slowed by reducing carbon (as carbon dioxide) in the atmosphere through forest uptake. However, very little is known about Chinese ecosystems' ability to absorb carbon dioxide. This study will compare carbon and water uptake with comparable ecosystems in the United States.



An Eddy Covariance System to Measure C and Water Fluxes from a Corn Field near Jinzhou City, Northeastern China.

To date, six of China's leading research institutions (including Chinese Academy of Sciences (CAS), Chinese Academy of Forestry, Beijing Forestry University, China Metrological Administration, Fudan University, and Nanjing University), have committed funding to support USCCC research.

During April-May 2004, a workshop chaired by the SGCP collaborator, Dr. Jiquan Chen, was conducted at the University of Toledo to train Chinese scientists on the Eddy Covariance technology for measuring carbon and water fluxes. In addition to the six existing forest study sites in NC and Ohio, the USCCC has identified over 10 other sites that represent restored aspen lands, degraded grasslands, natural wetlands, and crop lands. More information about USCC can be found at: <http://research.eeescience.utoledo.edu/lees/research/usccc/>. (Contributed by Ge Sun).

## Happy Birthday, Smokey!

Besides being an outstanding addition to the Forest Inventory and Analysis unit in Knoxville, Business Services Assistant Melissa Kear is also a talented baker. Melissa owns "Icing on the Cake" designing and baking cakes for all occasions. Melissa bakes a special cake each month to celebrate birthdays of FIA staff and the August cake was designed in honor of Smokey's 60<sup>th</sup> birthday. We were "bearly" able to wait until break time and "shoveled" in as much as we could before getting back to putting out fires in FIA.



## Southern Aspect

includes events and employee news from the research laboratories and administrative staffs of the Southern Research Station, which serves Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. This newsletter is published by the USDA Forest Service, Southern Research Station, P.O. Box 2680, 200 WT Weaver Boulevard, Asheville, NC 28802.

Editorial Staff: Shane Coates and Rod Kindlund.

Printed on Recycled Paper

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint, write USDA Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

United States  
Department of Agriculture  
Forest Service  
Southern Research Station  
P.O. Box 2680  
200 Weaver Boulevard  
Asheville, NC 28802