



ALABAMA

FOREST SERVICE RESEARCH & DEVELOPMENT

STATE FUNDING HISTORY	Enacted FY 2003 (\$)	Enacted FY 2004 (\$)	Pres. Budg. FY 2005 (\$)
AUBURN			
SRS-4105 Veg Mgmt/Longleaf Pine	1,168,764	1,158,265	1,177,103
SRS-4703 Biological/Engineering Sys	1,246,315	1,235,119	1,241,521
ALABAMA TOTAL	2,415,079	2,393,384	2,418,624

RESEARCH & DEVELOPMENT, a division of the USDA Forest Service (FS R&D), strives to be the “go to” organization for information and solutions to sustain forests and rangelands and the values they provide people. FS R&D has the flexibility to address today’s issues effectively and to respond to tomorrow’s needs. Among the world’s leaders in forest conservation research, scientists contribute to the stewardship of land, real property and society by providing research results that help create jobs and affordable homes, and improve the health of trees, forests and forest ecosystems. Innovative research products permit the Forest Service and other public and private land managers to monitor and manage forest responses to environmental change, contributing significantly to the sustainability of the nation’s forests and rangelands and improving human health.

FS R&D operates six research stations, the Forest Products Laboratory, and the International Institute of Tropical Forestry located in Puerto Rico. It employs over 500 scientists and hundreds of

technical and support personnel at 67 field sites throughout the nation. The FY 2005 President’s Budget includes \$280,654,000 for Forest and Rangeland Research.

The **Southern Research Station**, with headquarters in Asheville, NC, maintains 26 Research Work Units in 11 States, and conducts forest research and development in laboratories, on university campuses and at experimental forests in the 13 Southern States (i.e., FL, LA, OK, NC, KY, GA, SC, TN, MS, TX, AR, AL, and VA). The Southern Research Station currently maintains two research work units at Auburn and sub-units at three other locations in Alabama.

The FY 2005 President’s Budget includes \$50,640,000 for the Southern Research Station, this an increase of \$1,304,000 over the FY 2004 Final Appropriation.

BREWTON

Escambia Experimental Forest. This 3000-acre experimental forest near Brewton, AL is under a 99-year lease from the T.R. Miller Co. The

Escambia Experimental Forest was established in 1947 and supports many long-term longleaf pine research studies and demonstration areas. It is managed by SRS-4105 in Auburn.

AUBURN

George W. Andrews Forestry Sciences Laboratory. The G. W. Andrews Forestry Sciences Laboratory is a 23,000 sq ft federal facility located on the campus of Auburn University. This laboratory is organized into two Research Work Units and utilized by 11 scientists and approximately 20 support staff.

SRS-4105, Integrated vegetation management for sustaining southern forests and longleaf pine ecosystems. The mission of this unit is to develop integrated vegetation management strategies and practices that enhance and sustain Southern forest diversity and productivity and to develop management systems and models for restoring and sustaining longleaf pine ecosystems.

SRS-4703, Biological/Engineering Systems and Technologies for Ecological Management of Forest Resources. The mission of this unit is to provide engineering knowledge and improved economically viable forest operations for sustained resource management and to develop an understanding of the interactions between biological and engineering systems in forest ecosystems.

HUNTSVILLE

SRS-4101 subunit, Southern Appalachian Forests. This research work subunit is part of the Southern Appalachian Hardwoods unit

headquartered at Bent Creek, NC and was established in FY 2000 on the campus of Alabama A&M University. The research conducted deals with upland hardwood silviculture in north Alabama, and central TN and KY. The Project Leader for this unit is stationed at Bent Creek, NC.

TUSKEGEE

SRS-4802 subunit, Legal, Tax, and Economic Influences. This research work subunit is part of the unit headquartered at New Orleans, LA. Research is conducted cooperatively with the Alabama Consortium on Forestry Education and Research (Tuskegee University, Auburn University, Alabama A&M University, National Forests in Alabama, Southern Research Station, and the Alabama Forestry Commission). This research focuses on the sociological and socio-economic impacts of changing forest management practices in southern forests and examines the role and structure of limited resource landowners' participation in forestry. The Project Leader of this unit is located at New Orleans, LA.

RELATED RESEARCH

Forest Inventory and Analysis Research (FIA). Forest Inventory and Analysis is administered in Knoxville, TN, Asheville, NC, and Starkville, MS. The FIA unit develops, analyzes, and maintains forest resource information for the Southern States, Puerto Rico and the Virgin Islands; and conducts research to provide improved inventory and evaluation techniques. The FIA program includes plot-based forest health indicators along with comprehensive forest inventory data to provide information on the status, trends, and condition of forest resources. Annualized forest

inventories are currently being implemented across the South. Researchers in the FIA unit are conducting annual inventories in Alabama, in collaboration with the State. The within-State costs for annual inventory field data collection amount to approximately \$543,000.

RELATED PROGRAMS

National Recruitment Initiative at Alabama A&M University. In addition to research being conducted currently by the silviculture subunit at Alabama A&M University (AAMU), Normal, the Southern Research Station administers a Service-wide Recruitment Initiative Program on campus. The program is aimed at meeting the future resource needs of the Forest Service. The University recently received the Society of American Forester's Professional Accreditation – making AAMU the first and only Historically Black Colleges and University (HBCU) to receive such distinction. USDA Forest Service provides funding to AAMU through a capacity enhancement grant to the Center of Excellence in Forestry for training, teaching, and development of research opportunities for students and faculty in the School of Agricultural & Environmental Sciences.

FY 2005 PROGRAM CHANGES:

- The FY 2005 President's Budget calls for increased research in areas associated with the President's Healthy Forests Initiative, including invasive species impacts, and the expansion of technology transfer activities. The FY 2005 President's Budget also provides new funding for research on water quality and quantity issues; and funding to cover inflationary fixed cost increases.

- An increase of \$100,000 will be used for applied fire research and \$50,000 for research on invasive species in the region for SRS-4105.
- Forest Service Research and Development will lead an Agency-wide effort to optimize the delivery and practical use of research findings. This is essential to successful implementation of Forest Service priorities, including the President's Healthy Forest Initiative. Opportunities have been identified that leverage current science and technology applications efforts in healthy forests applied science, watershed management, invasive species, hazardous fuels utilization and management, and community preparedness. New funds in FY 2005 will be targeted to leading-edge technical assistance on a competitive basis.
- Funding increases include \$18,654 for SRS-4105 and \$14,261 for SRS-4703 to cover fixed cost (facilities, salaries, utilities, etc.).
- To support the expanded research activities supporting the Healthy Forest Initiative, longleaf pine silviculture research at SRS-4105 and bioenergy research of small diameter wood at SRS-4703 will be curtailed.

SIGNIFICANT RESEARCH PRODUCTS:

- Published the "Nonnative Invasive Plants of the Southern Forests," a new guide for identifying and controlling invasive plants in Southern forests. The book provides a resource for identifying and controlling the worst 33 nonnative plants that are aggressively invading the Southern region.

- Erosion control techniques for forest roads were studied, with alternative techniques being evaluated on the basis of runoff concentrations and sediment export. This work will be of interest to the owners/managers of on Federal, NIPF, and industry forest lands.
- Four studies were completed which indicate that major impacts on aquatic ecosystems are primarily due to the disturbance of headwater forest sites and that use of sulfometuron or imazapyr causes no additional ecosystem impacts.
- Early observations from a Midstory Reduction Study at Fort Benning, Georgia, ways suggest mechanical methods are effective to eliminate midstory "fire ladders". Rapid regrowth of mechanically-treated understory vegetation indicates repeated burning will be required to maintain the open structure of rehabilitated forests.
- The Alabama Consortium on Forestry Education and Research was formed to promote communication and collaboration among diverse institutions involved in forestry in Alabama. Last year focus of the Consortium was to prepare of coordinated plans to develop

the knowledge and provide outreach measures to address issues related to limited-resource landowners in the State.

- Initial observations from the Fire and Fire Surrogates Study being conducted at Myakka River State Park, Florida initial indicate saw-palmetto, the principal and most dangerous fuel in this ecosystem, cannot be effectively reduced by fire-only treatments. These former "wet prairies" have crossed an ecological threshold. Palmetto is now so prevalent that fire only creates a tenuous equilibrium at the levels currently present in the landscape. Prescribed burning must be followed by mechanical treatment.

SOME CLIENTS/COLLABORATORS:

- Alabama A&M University
- Alabama Forestry Commission
- American Pulpwood Association
- Auburn University
- Caterpillar Tractor
- Longleaf Alliance
- Mead-Westvaco
- Mississippi State University
- Tuskegee University