



TEXAS

FOREST SERVICE RESEARCH AND DEVELOPMENT

STATE FUNDING HISTORY	Enacted FY 2003 (\$)	Enacted FY 2004 (\$)	Pres. Budg. FY 2005 (\$)
NACOGDOCHES			
SRS-4251 Wildlife Habitat	1,125,000	1,114,894	1,219,032
TEXAS TOTAL	1,125,000	1,114,894	1,219,032

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, and 26 Research Work Units in eleven States, 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 Station maintains one Research Work Unit at Nacogdoches, Texas on the Stephen F. Austin State University campus, and a research presence at Texas A&M University.

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

COLLEGE STATION

SRS-4153 Subunit, Southern Institute of Forest Genetics. This research work unit is headquartered in Saucier, MS, with a subunit located in College Station, TX. Research at the College Station location, on the campus of Texas A&M University, concentrates on cytogenetics of forest tree species with a special emphasis on understanding the organization and relationships among southern pine genomes.

NACOGDOCHES

Stephen F. Austin Experimental Forest. Located about 15 miles southwest of from Nacogdoches, this experimental forest is home to the Stephen F. Austin Interpretive Trail, built by the Station, the Southern Region of the Forest Service, and the College of Forestry at Stephen F. Austin State University. Opened for public use in 1997, the trail provides an outdoor classroom setting that is used extensively by the University and many agencies and organizations.

SRS-4251, Integrated Management of Wildlife Habitat and Timber Resources. This unit has scientists located at both Nacogdoches, TX and Knoxville, TN. The unit's mission is to quantify relationships between wildlife habitat values and forest management strategies and to incorporate findings into management planning processes. Unit scientists conduct research on streamside management zones, forest management for endangered and sensitive species like the endangered red-cockaded woodpecker, neotropical migratory birds, and the response of wildlife to various forest harvesting techniques.

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 Texas, in collaboration with the State Forester. The within-State costs for annual inventory field data collection amount to approximately \$700,000.

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.
- 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 in the amount of \$86,000 will be provided to expand research on western gulf amphibians and \$17,960 to cover fixed cost (facilities, salaries, utilities, etc.) at the Integrated Management of Wildlife Habitat and Timber Resources unit, SRS-4251.

SIGNIFICANT RESEARCH PRODUCTS

- Station scientist served on a team led by the US Fish & Wildlife Service to produce a new recovery plan for the red-cockaded woodpecker.
- Determined the effect red-cockaded woodpecker management on other avian species.
- Described important interactions demonstrating that the red-cockaded woodpecker is a keystone species in fire-maintained southern pine ecosystems.
- Determined and evaluated the status and current management of red-cockaded woodpeckers in the West Gulf Coastal Plain and Interior Highlands.
- Studied the reproductive biology of the timber rattlesnake in eastern Texas
- Determined breeding phenology of 13 species of East Texas frogs.

- Determined the impacts of streamside management zones on small mammals in the Ouachita Mountains of Arkansas.
- Characterized diurnal roost characteristics of male and female red bats in the Ouachita Mountains of Arkansas.
- Assessed the potential impact of nest predation on the threatened Florida scrub-jay population in the Ocala National Forest.
- First to successfully map the genome for loblolly pine with a technology that uses fluorescence. Also, amended the existing map of the genome for slash pine.
- Developing a wildland fire risk assessment system that will enable State forestry organizations to evaluate site-specific risks across Texas, reducing the tremendous human and property loss caused by wildfire.

SOME CLIENTS/COLLABORATORS

Louisiana Department of Wildlife and Fisheries
National Wild Turkey Federation
National Forests & Grasslands in TX
Stephen F. Austin State University
Temple-Inland
Texas A&M University
Texas Parks and Wildlife Department
Texas Forest Service
The Nature Conservancy
USDI, Fish & Wildlife Service
USDI, Geological Survey, Biol. Resour. Div.
Western Gulf Forest Tree Improvement Program