



KENTUCKY

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). While the Station does not currently have a research location in Kentucky, research conducted at other locations throughout the South is applicable to forest resource management in Kentucky. Several units including the Appalachian Ecology and Management unit at Bent Creek, NC; the Watershed Unit at Franklin, NC; the Coldwater Fisheries, and Processing & Recycling units at Blacksburg, VA; and the Threatened & Endangered Species unit at Clemson, SC conduct research in Kentucky benefiting residents of the State.

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.

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 Kentucky, in collaboration with the State. The within-State costs for annual inventory field data collection amount to approximately \$364,000.

FY 2005 Program Changes

- The FY 2005 President's Budget for FS R&D 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.

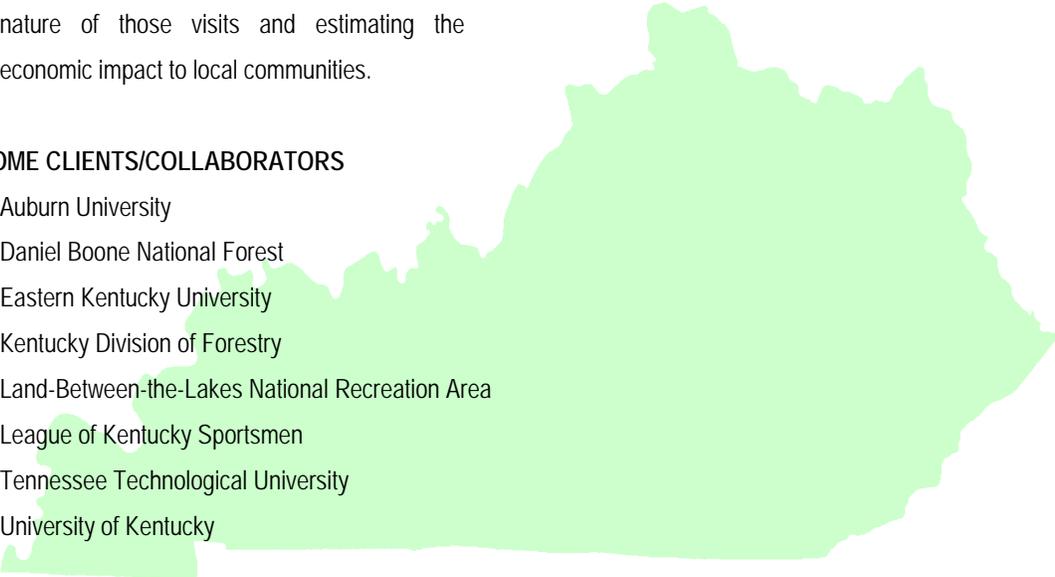
SIGNIFICANT RESEARCH PRODUCTS

- Made the results of the 2002 Southern Forest Resource Assessment available to a wide variety of users on CD-ROM. The Assessment, a two-year project led by the Forest Service, reports on the status, trends and potential future of southern forests and their various benefits.
- Evaluated methods for re-introducing blight-resistant American chestnut to sites where it was formerly found on the Daniel Boone National Forest.
- Collaborated with University of Kentucky to host a hardwood silviculture short course for state foresters who work with private landowners to develop forest management plans.
- Explored the use of fire to regenerate oak stands in Kentucky to benefit public and private land managers.
- Used research data from Kentucky to begin creating a version of the Forest Vegetation Simulator (FVS) that will be applicable to Kentucky. The FVS variant will provide the capability to make more accurate and realistic forest growth projections in Kentucky.
- Completed a 3-year study on the effects of the southern pine beetle infestation on endangered Indiana bats in Kentucky. Cooperators from Auburn University developed a predictive model of pine trees, southern pine beetle eruptions, and Indiana bat biology that suggests that the viability of Indiana bats in Kentucky will depend on the availability of large hardwood snags to sustain the bats when pines are not available.
- Surveyed nonindustrial forest landowners in the South to gauge their awareness of beneficial Federal income tax provisions. While these landowners were aware of a few of the key tax

provisions, they were unaware of some that could reduce their taxes.

- Provided managers of the Daniel Boone National Forest and Land-Between-the-Lakes National Recreation Area with estimates of the number of recreational visitors to each area and some specific information characterizing the nature of those visits and estimating the economic impact to local communities.

SOME CLIENTS/COLLABORATORS



Auburn University
Daniel Boone National Forest
Eastern Kentucky University
Kentucky Division of Forestry
Land-Between-the-Lakes National Recreation Area
League of Kentucky Sportsmen
Tennessee Technological University
University of Kentucky