WEST VIRGINIA

FOREST SERVICE RESEARCH AND DEVELOPMENT

STATE FUNDING HISTORY	Enacted FY 2003 ($)	Enacted FY 2004 ($)	Pres. Budg. FY 2005 ($)
MORGANTOWN			
NE-4557 Mng Oak-dominated Forests	2,296,857	2,265,560	2,278,670
NE-4751 Harvesting Strategies	230,680	227,838	229,156
MORGANTOWN TOTAL	2,527,537	2,493,398	2,507,826
PARSONS			
NE-4353 Mgmt Center App For	1,705,242	1,912,233	1,988,299
PRINCETON			
NE-4701 Efficient Use of Resource	1,130,531	1,116,603	1,126,603
NE-4803 Forests in Global Economy	1,150,417	1,136,244	1,142,819
NE-4805 Markets and Sustainability	154,118	152,219	158,100
PRINCETON TOTAL	2,435,066	2,405,066	2,427,522
WEST VIRGINIA TOTAL	6,667,845	6,810,697	6,923,647

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 Northeastern Research Station, headquartered at Newtown Square, Pennsylvania, maintains forest and rangeland research and development programs across 13 northeastern

states (i.e., CT, DE, MD, MA, NJ, NY, NH, ME, OH, PA, RI, WV, and VT). The FY 2005 President's Budget for the Northeastern Experiment Station Forest and Rangeland Research Program is $34,697,000. The Northeastern Research Station has six research work units in West Virginia -- two at Morgantown, one at Parsons, and three at Princeton.

MORGANTOWN

NE-4557, Disturbance Ecology and Management of Oak-Dominated Forests. Research by this unit focuses on four regional problems: (1) the lack of understanding about how defoliation by gypsy moths influences forest dynamics, successional patterns, and other ecological processes; (2) incomplete understanding of the population dynamics of the gypsy moth and other introduced pests; (3) the need to develop effective silvicultural treatments for rehabilitating and regenerating oak forests; and (4) the need to synthesize and integrate results from studies of disturbance effects and dynamics.

NE-4751, Integration of Forest Operations into Eastern Hardwood Intermediate Cuttings and Structural Retention Treatments. This unit uses systems analysis to evaluate alternative harvesting strategies for all forested geographic regions in the Northeastern U.S.

PARSONS

NE-4353, Sustaining the Diversity and Productivity of Appalachian Forests. This unit is explaining the role of natural and human-induced factors in the sustainability of central Appalachian forest ecosystems. Also, it is providing guidelines for managing these forests for a range of products and benefits while maintaining the productivity and diversity of the soil, water, and forest resources.

PRINCETON

NE-4701, Efficient Use of the Northern Forest Resource. This unit promotes natural resource conservation and helps sustain forest-based businesses and economies through research and development on resource characteristics, forest management practices, and innovative processing technologies. Current research will (1) determine how wood quality and utilization opportunities are affected by silvicultural systems and forest operations, and (2) develop more effective production control methods and software tools to analyze the impacts of production systems on efficiency of resource utilization.

NE-4803, Eastern Forest Use in a Global Economy. This unit develops estimates of primary and secondary hardwood product production and consumption. It analyzes factors and events that are likely to significantly alter wood production and consumption patterns. It also examines opportunities for extending and conserving the hardwood resource and improving the efficacy of hardwood forest management, utilization, and rural development initiatives.

NE-4805, The Influence of Markets on the Sustainability of Eastern Hardwood Forests. This unit examines interrelationships between forest product markets and the composition, structure, and sustainability of the eastern hardwood forest.

FY 2005 PROGRAM CHANGES:

- An increase for research on watershed management will focus on 1) studies to improve hydrologic conditions and control excessive runoff from forests and, 2) studies to improve soil carbon monitoring techniques and enhance carbon monitoring at the Fernow Experimental Forest.
- Science-based Technology Transfer. The focus of this program emphasis area will be to transfer high priority technology to a wide range of interests. The mission of research and development in the USDA Forest Service is knowledge discovery, technology development, and technology implementation. At the Northeastern Research Station, we are focusing our effort on "science-based technology implementation." That is, technology that is based on sound science and helps address more narrowly defined stewardship issues. A pending competitive grant program will determine the specific allocation to the northeast.

SIGNIFICANT RESEARCH PRODUCTS:

- A predictive habitat model was developed for Virginia Northern flying squirrels. The model may help concentrate management efforts in high priority locations.
- A completed analysis of the red maple resource in the 13 Northeastern States has identified the states with the largest volumes of red maple timber and found that in many states volumes of red maple are increasing faster than volumes of the more valuable tree species.
- Final revisions to the ROMI-3 software program, a tool that enables the value-added wood products industry and researchers to evaluate alternative raw material processing and product options, have been completed.
- Updated reports on engineered wood product use and a North American market assessment were released.
- Reports on wood use in the U.S. pallet, furniture, and cabinet industries were published.
- Hosted the annual USDA interagency research forum on gypsy moth and other invasive species, and produced a proceedings volume that contained 75 abstracts and papers.

SOME CLIENTS/COOPERATORS:

Boise Cascade
Caterpillar Company
George Washington National Forest
Monongahela National Forest
National Hardwood Lumber Association
Oak Ridge National Laboratory
Pennsylvania Bureau of Forestry
Pennsylvania State University
Thomas Jefferson National Forest
University of Georgia