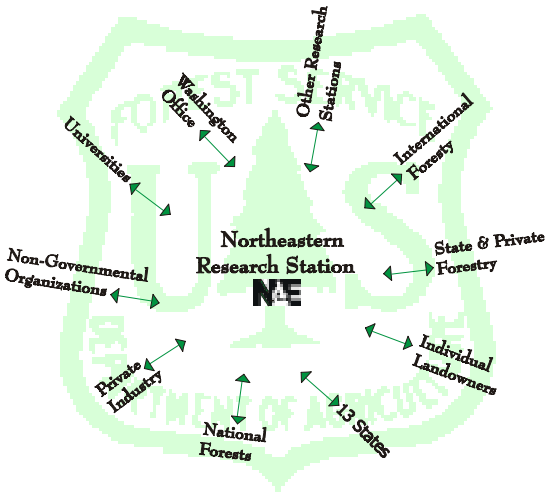
MISSION

To develop and provide scientific information and technology to sustain forests and their uses.

VISION

Over the next decade, we challenge ourselves to become and be viewed by others as:



- A major contributor in solving regional, national, and global issues related to natural resource management; a Station that is routinely consulted when new problems arise.
- A respected partner with academic institutions, state agencies, private organizations, industry, other Forest Service units, Federal agencies, and international institutions to solve problems of mutual interest; we are valued for our initiative and our cooperative approach.
- An organization that implements an integrated research program that considers ecological, social, and economic values.
- An acknowledged leader of forestry research in the northeastern United States.

Highlights of our 75 years

- Established First Forest Service Quarantine Facility for Exotic Pest Research.
- Established Hubbard Brook Ecological Study.
- Developed GYPCHEK Viral Insecticide.
- Improved Efficiency and Profitability of Maple Syrup Production.
- Developed Stocking Guides for Northeastern Forests.

INTRODUCTION

The Broad View

The Northeastern Research Station (NE) improves forest management through research that meets society's needs and conserves natural resources. As we look to the future, we are presented with many opportunities to improve our products and services, to enhance our ability to share technology and information, and to build a more diverse NE workforce.

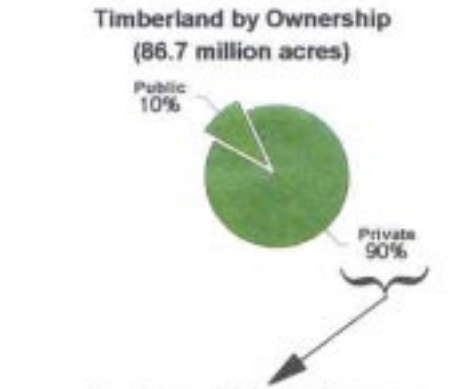
Many sources were consulted to develop this Strategic Plan including research documents, public views and opinions, and the comments and suggestions of our internal and external customers. Because we used these sources as the foundation for this document, we feel confident that the Strategic Framework clearly illustrates where we are now and where our research efforts are going in the next 5 to 10 years.

A Unique Region, A Unique Research Station

The 13-state northeastern region is the most populated, the most urbanized, and the most heavily forested region of the country. The forest provides habitat for thousands of plant and animal species.

Northeastern forests provide multiple benefits and values. These range from economic and recreational benefits to aesthetic and spiritual values. Forest-related industry contributes significantly to the economy of the region - 25 percent of all forest industry wages in the United States are paid within this 12 percent of the nation's area. Over 60 million people depend upon the contributions of forests to air and water quality in this region. Fifty-seven percent of the land area in the Northeast is timberland and approximately 90 percent of this is privately owned.

Since 1923, the Northeastern Station has provided the scientific leadership to improve forested watersheds; guide management on millions of acres of productive public, private, industrial, and urban forest; protect forests from insects and diseases; and improve utilization of the region's wood resources. The Station's human resources provide unique support for a regional and interdisciplinary approach to forest problems. Our eight experimental forests, six established research natural areas, and long-term data on forest and watershed change provide an unequaled information resource for research.



Numbers of Private Owners
by Size Class and Acres Owned

Size class of ownerships (acres)	Number of Owners	Number of Acres (millions)
1-49	2,237,400	19.4
50-499	329,400	33.1
500+	10,100	24.9
Total	2,576,900	77.4

Opportunities

Our future success will be determined by our ability to act on specific opportunities. Increased utilization of northeastern forests can only be sustained when we employ sound forest management practices. There is a growing demand for current information on forest resource status and trends, as well as concern about the effects of natural and human disturbances. The Northeastern Research Station is in a unique position to develop and provide the scientific information needed to address these issues.

Many other opportunities will arise in the next decade, making it imperative that the Northeastern Research Station focuses on delivering tools and information to the partners who care about the effective management of northeastern forests. By building on and extending these partnerships, we will meet the needs of the people and ensure the ongoing sustainability of forest ecosystems in the Northeast.

Challenges

Over the next decade, we will face many challenges. One of the most significant of these will be to develop tools, methods, and models to facilitate multiple-use management in a changing environment. This development is best accomplished by directing our research to the needs of our diverse customers, which often means addressing potentially conflicting management objectives. Non-governmental organizations, industrial and non-industrial private forest-land owners, state, tribal, and federal agencies have individual, specific expectations from northeastern forests. We need to identify and address the needs of each of these groups if we are to continue to be a successful research organization.

"Pressure is increasing on non-industrial private forest lands to supply a greater share of the Nation's demand for timber. Unless management of these lands improves, future demand will strain their supply capability and lead to deteriorated ecosystems, foregone benefits and income, and lost opportunities for rural economic development."
USDA Forest Service GPRA Strategic Plan.

"What to measure and what scale to use are critical questions that must be answered before scientists can provide a scientific foundation for conservation strategies."
Sustaining the People's Lands; Recommendations for Stewardship of the National Forests and Grasslands into the Next Century (The Committee of Scientists Report); Written by a committee of scientists for the Secretary of Agriculture; March 15, 1999.

In developing this Strategic Plan, the following challenges and strengths were noted:

Responsiveness - how can we respond more quickly to meet the information needs of land managers?

Going Beyond the Northeast - how can we share information with others on a regional, national, and international basis?

Technology Transfer - how can we best put research discoveries to work and meet people's needs at the regional, national, and international levels?

Scale - we work across large temporal and spatial scales; how can we best demonstrate the relevance of research that ranges from molecules and microseconds to mountain-sides and millennia?

"The Forest and Rangeland Renewable Resources Research Act of 1978 authorizes the agency [Forest Service] to conduct and cooperate in research to generate knowledge about protecting, managing, and using forested and rangeland renewable resources."
USDA Forest Service Government Performance & Results Act (GPRA) Strategic Plan.

"Forests are immensely important natural resources. Yet the nation's primary information on these resources is falling further behind. This information gap is creating an ecological and economic crisis and must be repaired."
Forest Inventory & Analysis Program - The Report of the Second Blue Ribbon Panel.

GOALS

The following goals were developed using a variety of reference materials including feedback from NE employees and public survey data. Each goal is followed by a set of objectives to achieve the goal. These goals and objectives are not necessarily equal in the amount of effort or resources directed at them now or in the future.

Goal

Develop and deliver guidelines to help landowners and timber users sustain the aesthetic, ecological, fish and wildlife, recreation, timber, and water values of the mostly privately owned northeastern forest.

Objectives

- Develop silvicultural techniques to enhance services and values, specifically including techniques that meet the management objectives of non-industrial private forest-land owners.
- Develop techniques to renew and restore forests after disturbance, including regeneration of woody and herbaceous species.
- Develop appropriate vegetation management strategies and tools along the urban/rural gradient.
- Provide synthesis and tools to integrate forest resource management, including computerized decision support tools.
- Improve the efficiency of the northeastern forest industry through information and technology development.
- Enhance our technology transfer to forest-land owners, managers, and timber users directly and through partnerships with others such as state foresters, cooperative extension specialists, forest industry, and our colleagues in State and Private Forestry and National Forest Systems.
- Develop and provide information on fish and wildlife community responses to forest and landscape change, including responses of threatened, endangered, and sensitive species.

"It should be emphasized that an informed, aware, and participatory public is indispensable to promoting sustainable management of forests. In addition to providing a common understanding of what is meant by sustainable forest management in the temperate and boreal regions, the criteria and indicators should be useful in improving the quality of information available not only to decisionmakers but also to the general public. This in turn should better inform the policy debate at national and international levels."
Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests, Sustaining the World's Forests, the Santiago Agreement.

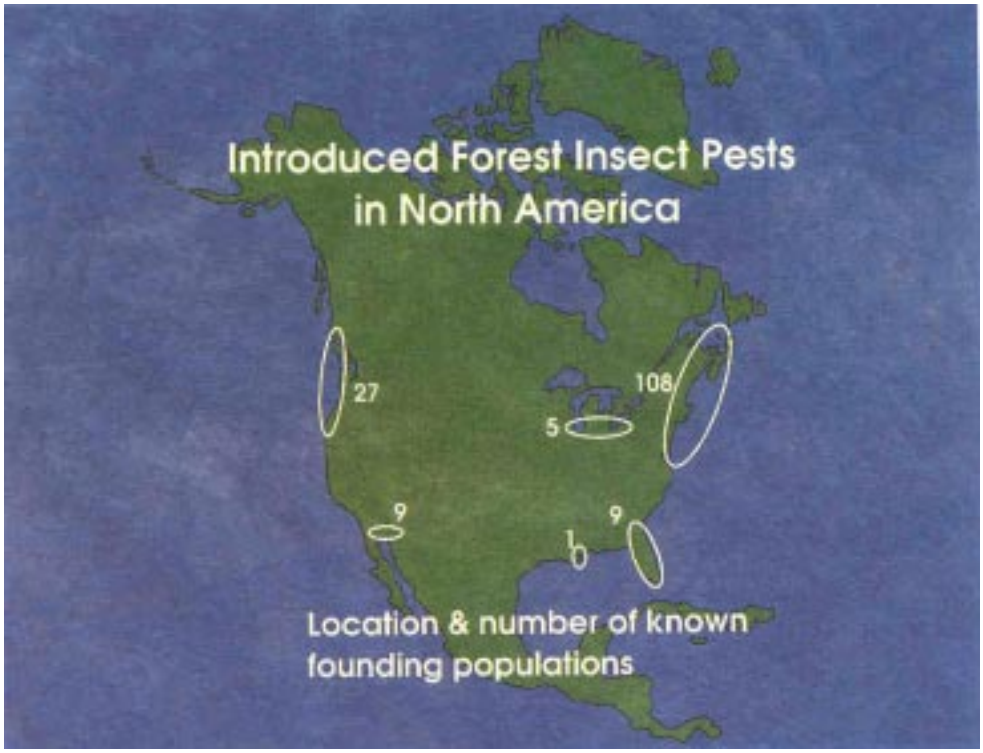
"Conduct research on ecosystem structure and function at multiple scales, the role of disturbance processes such as fire, insects, and diseases in shaping temporal and spatial landscape patterns, and the effects of these processes on plants and animals."
USDA Forest Service Government Performance & Results Act (GPRA) Strategic Plan.

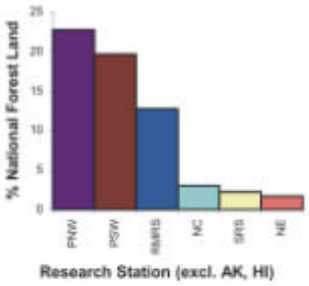
Goal

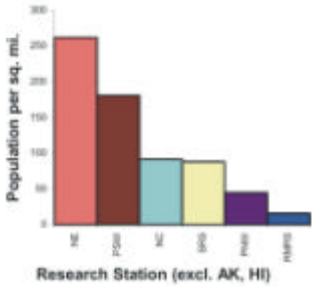
Develop and deliver basic and applied information about the effects of single and multiple stressors, such as air pollution, global change, and insect and disease problems, on watershed and ecosystem processes.

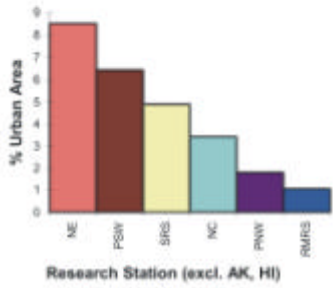
Objectives

- Understand the relationships of forests and watersheds to natural cycles and human disturbances.
- Develop technology to effectively detect, monitor, and eradicate or manage non-native invasive species.
- Understand the effects of air pollution on forest nutrient cycles, patterns of insect and disease occurrence, forest renewal, and on forest health.
- Understand the interactions of forest management with forest carbon storage and the contribution of forests to global climate change.
- Understand the interactions of native and exotic pests (insects, diseases, and weeds) with other stressors, such as drought, fire, and nutrient deficiencies.









Goal

Develop and deliver information about the relationships between urban forests and quality of life.

Objectives

- Develop information and tools to improve human community environments through urban forestry research and technology transfer.
- Understand the relationships of urbanization and fragmentation to ecological conditions of forests.

"To start with I had to know something about the people, the country and trees. And of the three the first was the most important."
Gifford Pinchot, First Chief of the USDA Forest Service.

"Foresters intervene in ecological systems to increase the production of socially desired benefits (output of goods and services) and to decrease outputs that are perceived as negative (floods, soil erosion, genetic loss, fires). All professional forestry practices manipulate human uses and access to forest ecosystem benefits. Hence, all forestry is social in terms of its rationale for practice, its form of practice, and the socially approved incentives for its practice."
William R. Burch , Hickman Professor of Forestry, Yale School of Forestry and Environmental Studies.

Goal

Develop and deliver information about social and economic values and their implication to forest resource management and use.

Objectives

- Develop and provide information on economic values and their effects on management and stewardship decision for all categories of forest-land owners and users.
- Develop and provide information about the relationships among social values, human behaviors, and the condition and use of forest resources.
- Develop information and methods for accessing the influence of demographic and socioeconomic trends on forest conditions and use.
- Evaluate the past and present impacts of forest products markets on the structure and composition of the northeastern forest.

Goal

Inventory and continue to monitor status, trends, and health of the northeastern forest and its use by forest industry.

Objectives

- Design and implement an annual forest inventory and monitoring plan.
- Develop improved techniques to monitor forest health.
- Develop and test techniques to monitor implementation of regional, national, and international standards of sustainability.
- Monitor timber product output and use in the major primary and secondary manufacturing sectors and link outputs to consumer and industrial demands.
- Integrate inventory and monitoring information with the development of management guides to assess potential effects across the Northeast.

CONCLUSIONS

Moving Forward

We believe that every person in the 13 states covered by the Northeastern Research Station is positively affected by the natural resources found here. We must each contribute to sustained forest growth by balancing the interests of government, industry, non-industrial organizations, and the general public. In partnership with other regional, national and international research organizations, we will develop and disseminate information that will identify new opportunities and resolve issues as they occur. We will focus on the unique strengths of the Northeastern Research Station to meet the needs of society.

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