

# Forest Health Monitoring

USDA Forest Service  
Northeastern Area  
State and Private Forestry



## Description:

Forest Health Monitoring (FHM) is a national program with a mission to monitor, assess, and report on the status, changes and trends in forest ecosystem health through partnerships with multiple agencies including the USDA Forest Service, State Foresters, and other State and federal agencies and academic groups. A main goal is to provide timely, objective and consistent State, Regional, and National reports on forest health issues to a range of audiences for use in policy and management. Issues are addressed that affect forest sustainability, as defined within the Santiago Declaration and Accompanying Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests.

Forest Health Monitoring relies upon scientific data that are collected, compiled, and analyzed by the FHM Program and other USDA Forest Service Programs in cooperation with State agencies. The FHM and Forest Health Protection (FHP) Programs together provide 'off-plot' (aerial and ground survey) data about damages caused by specific causal agents. The FHP Program also provides narratives of causal agent occurrences in Pest Condition Reports. The Forest Inventory and Analysis (FIA) Program provides data from their Phase 2 and Phase 3 ground plots where a variety of forest health indicators are measured.

## Key Issues:

- **Detection monitoring** to estimate with confidence the current status, extent, changes, and trends in selected indicators of forest ecosystem conditions;
- **Evaluation monitoring** of associations between changes or trends in indicators of forest condition and indicators of natural and human-caused stressors, including changes in forest extent and distribution;
- **Intensive Site monitoring** to identify mechanisms of ecosystem structure and function through long-term monitoring of ecosystem processes;
- **Research on Techniques** to improve methods for detection and evaluation monitoring.

## Accomplishments:

- **State and regional analysis and reporting efforts** are addressing forest health issues throughout the Northeastern Area. Reports use quantified information obtained through databases developed by FHP and FIA along with expert knowledge captured through FHP field offices and State agencies.
- **Detection monitoring data** for FHP pest surveys and FIA plot conditions during 1990 through 2002 are being compiled into a regional GIS database to assist future reporting efforts.
- **Evaluation monitoring grants** were awarded to twelve state agencies and research institutions to help investigate forest health problems identified through detection monitoring efforts.
- **Cooperative efforts with national forests** are being conducted to supplement investigations of specific forest health problems at the Allegheny National Forest.
- **New methods to conduct urban forest health monitoring** are being developed at several test locations in Maryland, New Jersey, Indiana, and Wisconsin in cooperation with multiple agencies.

## Budget History:

<b>FHM Program: Off-Plot Surveys and Evaluation Monitoring Projects</b>				
<i>(\$ Thousands)</i>				
	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Total</b>	\$1,119	\$1,276	\$1,421	\$1,239

## Future Direction:

- Annual reporting efforts will be streamlined as regional databases are developed.
- Additional cooperative investigations on national forests will be initiated.

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1/7/04 -