

# When science-based plans are used to manage New Jersey's forests, they are healthier and provide more benefits for people and wildlife.

Forests are continually changing due to natural causes such as storms, wind, lightning, insects, disease and flooding. People cause change by clearing land, harvesting timber, careless fires, and introducing non-native invasive species.

**Proper management can reduce damage and increase forest benefits.**

## THE HISTORY OF NEW JERSEY FORESTS

Contrary to popular belief, when colonists arrived in the 1600's in what is now New Jersey, it was not covered by "wall-to-wall" forests. Early settlers told of fresh meadows, "*maise*" lands, and open treeless lands. In fact, Native Americans used fires to improve hunting and remove trees to sight their enemies. At least one village covered 150 acres of cleared land. When it became too far to carry firewood, they abandoned sites and cleared new areas.

By the American Revolution nearly all of central New Jersey was cleared for farmland. Trees were the only fuel to heat homes and make charcoal to feed iron and glass forges. After the Civil War, anthracite coal from the west became available for use in forges.

In 1884, the annual census reported that the original forests of New Jersey had disappeared except from the most inaccessible ridges in the northwestern part of the state and that demands for railroad ties and other wood products were taking even these forests.

During the 1890s a conservation ethic began to develop. New Jersey's first State Forester was appointed in 1907, and a forest fire control organization and a nursery for growing forest seedlings were established. A cooperative program to assist private landowners to manage and reforest their lands began soon after.

## NEW JERSEY FORESTS TODAY

Fortunately New Jersey's forests are resilient. After four centuries of use and abuse, 45% of New Jersey is still covered by forests. The amount of forested acreage has remained about the same since 1956 despite new highways and city growth, due to abandoned farms reverting to forests and open space included in planned developments.



**Upland central hardwoods**

The extent of the State's forests today is also partly due to research by the US Forest Service Silas Little Research Station at the Brendon T. Byrne State Forest in cooperation with the New Jersey Forest Service and other research cooperators including Rutgers University and Stockton College. These efforts have led to recommended techniques

for prescribed burning, the management of Atlantic white-cedar and pitch pine, as well as many other forestry practices in use today throughout New Jersey and the rest of the country.



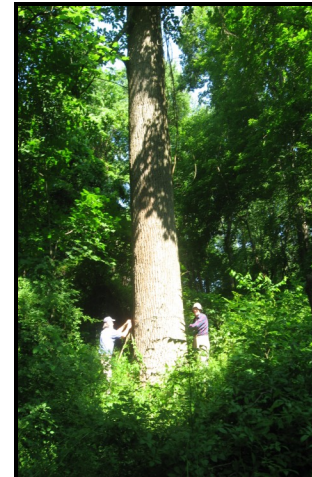
**Atlantic white-cedar**



**Pitch pine**

## THE FUTURE OF NEW JERSEY FORESTS

New Jersey's forests can provide a variety of benefits for everyone when properly managed using science-based plans. Forests protect watersheds that produce pure water. Establishing a mixture of forest types and age groups provides habitats for a wide range of birds and wildlife, wood products, employment, income, recreation, and other economic and non-economic benefits to the citizens of New Jersey.



**48-inch diameter yellow-poplar**

When New Jersey's forests are not managed however, there is greater potential for insect attacks, disease outbreaks, dangerous fuel build-ups, and invasive species infestations.

Incorporating the latest scientific information and proven best management practices into forest management planning insures that our forests are healthier, safer from devastating fires, and provide more benefits for everyone.

## Where can landowners get help to manage their forests?

The **NJ Forest Service** maintains an approved list of Consultant Foresters who can design forest management plans for individual, private woodland owners, based on the owners' specific objectives, needs, and property.

Funding to cost-share the creation of the plan and for certain woodland practices is available through the **Natural Resources Conservation Service**.

## REASONS WHY NEW JERSEY FORESTS SHOULD BE MANAGED

### Ecological forestry creates healthy forests of all ages.

- Management techniques include thinning, restoration, and replanting.
- The goal is to create ideal conditions to grow healthy trees.

### Managing forests produces many benefits.

- Increases carbon absorption.
- Provides healthy watersheds and quality water.
- Maintains biodiversity in New Jersey's forests.

### Air Quality is enhanced.

- Managed forests help cleanse the air.
- For every ton of wood a forest grows, it removes 1.47 tons of carbon dioxide from the air and produces 1.07 tons of oxygen.

### Fire catastrophes are reduced.

- Thinning overcrowded forests and removing excess fuels make forests more resistant to fire.

### Recreation opportunities are increased.

- Healthier forests encourage more people to spend time outdoors, and can be an attractive feature for tourism.
- Forests are more accessible when barriers formed by invasive plants are removed.

### Wildlife habitat is improved.

- Thinning and harvesting stimulate the growth of food sources for many wildlife species, including threatened and endangered (T&E) species.
- Openings created by harvesting provide habitat for mammals, a variety of songbirds, and T&E species.

### Wood products are produced.

- This helps reduce the need for imports from countries where forests are often not properly managed.
- Local wood products can result in smaller carbon footprints due to shorter shipping distances.

### Maintaining healthy forests is the goal of forest management.

- Better management of New Jersey's forestlands insures that all of its forests will remain healthy and productive for generations to come.

## WHAT HAPPENS WHEN FORESTS ARE NOT MANAGED?

Preservation is a management tool, but leaving forests alone in the name of preservation and neglecting them can:

- Result in dangerous fuel build-ups with potential for wildfires that can cause devastating losses of life, property and natural resources.
- Cause crowded forest conditions making trees less healthy and more susceptible to disease and insect attack, including gypsy moth and bark beetles.
- Allow the establishment and spread of non-native invasive species which can prevent regeneration of native species.



An un-managed forest stand in New Jersey

## Want To Join NJFA?

For an application contact the  
**New Jersey Forestry Association, Inc.**

P.O. Box 367

Flemington, NJ 08833

or e-mail requests to:

[info@njforestry.org](mailto:info@njforestry.org)

or download an application on-line from:

[www.njforestry.org](http://www.njforestry.org)

or

Phone: 908.832.2400

Fax: 908.832.7534

#### Authors:

George H. Pierson, CF, NJ State Forest Service, *retired*

Charles J. Newlon, CF, USFS, *retired*

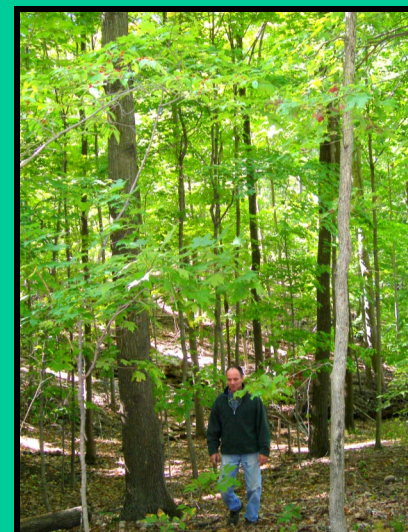
Mark C. Vodak, Ph.D. CF, Rutgers Cooperative Extension

Published by New Jersey Forestry Association, Inc.

NJFA-1 08/2010

# Forest Management Equals Healthy Forests

## Why New Jersey's Woodlands Should Be Managed



A managed forest in New Jersey



Brought to you  
by the

**New Jersey Forestry Association, Inc.**