



Productive

Forest Dynamics: Getting Better with Time

The dynamics of Minnesota's forests are very complex. As our state becomes more urban, people continue to seek an understanding about what makes our forests healthy and productive. There are also common myths about our forests:

MYTH 1 – Minnesota's forests are disappearing.

MYTH 2 – Leaving Minnesota's forests alone is better than harvesting them.

MINNESOTA'S FORESTS ARE BECOMING MORE ABUNDANT.

Over the years, our forests have been shaped by many factors beyond the obvious increase in demand for forest products. Among these factors are climate, unique soil and landform combinations, and disturbances. The current composition of our forests is primarily a result of disturbances that have occurred over the last two-to-three centuries, which has led to denser, more abundant forests across the state.

Wind as a disturbance. On July 4, 1999, strong, straight-line winds blew down hundreds of thousands of acres of trees in and around the Boundary Waters Canoe Area Wilderness in northeastern Minnesota. Other major blowdowns have also occurred throughout the state in recent years. Observations indicate that large trees and old trees are more susceptible to blowdown than young trees and even-aged forest stands, which are created through proper forest management.

Fire as a disturbance. Unlike wind disturbance, fires occur randomly with forest stands of all ages being equally likely to burn. However, the size, severity and frequency of fires has changed dramatically over the past 100 years due to society's efforts to prevent, suppress and fight forest fires.

It's also important to note that a managed forest will grow back sooner than a forest left to nature. After a disturbance such as wind or fire, a natural forest will

begin to regenerate in five-to-10 years with tree spacing that is less than favorable. In a managed forest, regeneration will occur faster and there will typically be more even spacing, allowing the forest to grow faster and stronger.

A MANAGED FOREST IS A MORE PRODUCTIVE FOREST.

According to the University of Minnesota Department of Forest Resources, a managed or harvested forest is two-to-four times more productive in terms of timber output than a forest left to nature. Other ways a managed forest is more productive include:

- ♦ A managed forest is more accessible for recreational purposes;
- ♦ A managed forest allows more light on the forest floor, which is better for plant growth and wildlife;
- ♦ A managed forest has fewer insect and disease problems; and
- ♦ A managed forest has less fire risk.

Through scientific forest management, we can have healthy, productive forests that are biologically diverse and still provide recreation, habitat for wildlife, as well as the products we use every day. All of which are reasons the forest industry is working to make our forests a better place.

