



Restoring Native Hardwoods Initiative

A History of Pine Management at
Mohican-Memorial State Forest



Near the turn of the last century, many acres of land (within the current Mohican-Memorial State Forest) were converted from native hardwood forest to farm land. The land was difficult to farm and only marginally productive. Soil erosion was a significant problem.

Many acres of Mohican were once marginal farm land.



Erosion on marginal farm land





Foresters began to plant pine trees to convert the farm land to forest. The purpose of the pine plantations was to stop soil erosion. Crews from the Civilian Conservation Corp planted thousands of pine trees.



3895
Plantation from Mohican Tower





The Restoring Native Hardwoods Initiative seeks to convert some of these pine plantations back to their original condition – Native, Hardwood Forest.

Let's look at four different pine plantations at Mohican to see how this works.

Stand #1



Plantation 227:

- Planted in 1960.
- Current age 57.
- 3rd-row thinned 1976 at age 16.

Foresters would remove every third row and sell the small trees for Christmas Trees back in the 1960's and 70's.

Stand #1



There are very few plants growing in the understory of this pine plantation. Consequently, there are very few wildlife species that would benefit from this condition.

Diversity? Very little.

Stand #1



View of the crowns of the trees:

- The tree crowns are small and narrow.
- Very little room for sunlight to reach through.

Diversity requires sunlight. No sunlight, no diversity.

Stand #2



Plantation 226

- Planted in 1960
- Current age 57
- 3rd-row thinned 1975 at age 15.
- Thinning 2006 at age 46.

Same age as Stand #1. What's the difference?

Thinning a second time.

Stand #2



Room to Grow:
Look at the hardwood regeneration. There are maples, poplar, sassafras, cherry and many others.

Notice also the herbaceous plant diversity.

Notice the pine trees are larger and have bigger crowns.

Stand #2



View of the crown:
50%-75% crown
closure. There is
room for sunlight
to reach through.

Direct sunlight is
reaching the forest
floor for portions
of the day.

Stand #3



Plantation 102:

- Planted in 1946.
- Current age 71.
- 3rd-row thinned 1953.
- Thinned 1970
- Thinned 1992

This stand of pine has been thinned 3 times. Hardwood trees are taking over now.

Stand #3



Transition!

There are two stands here. The larger trees are white pine. There is a completely regenerated native hardwood forest within because they have room to grow.

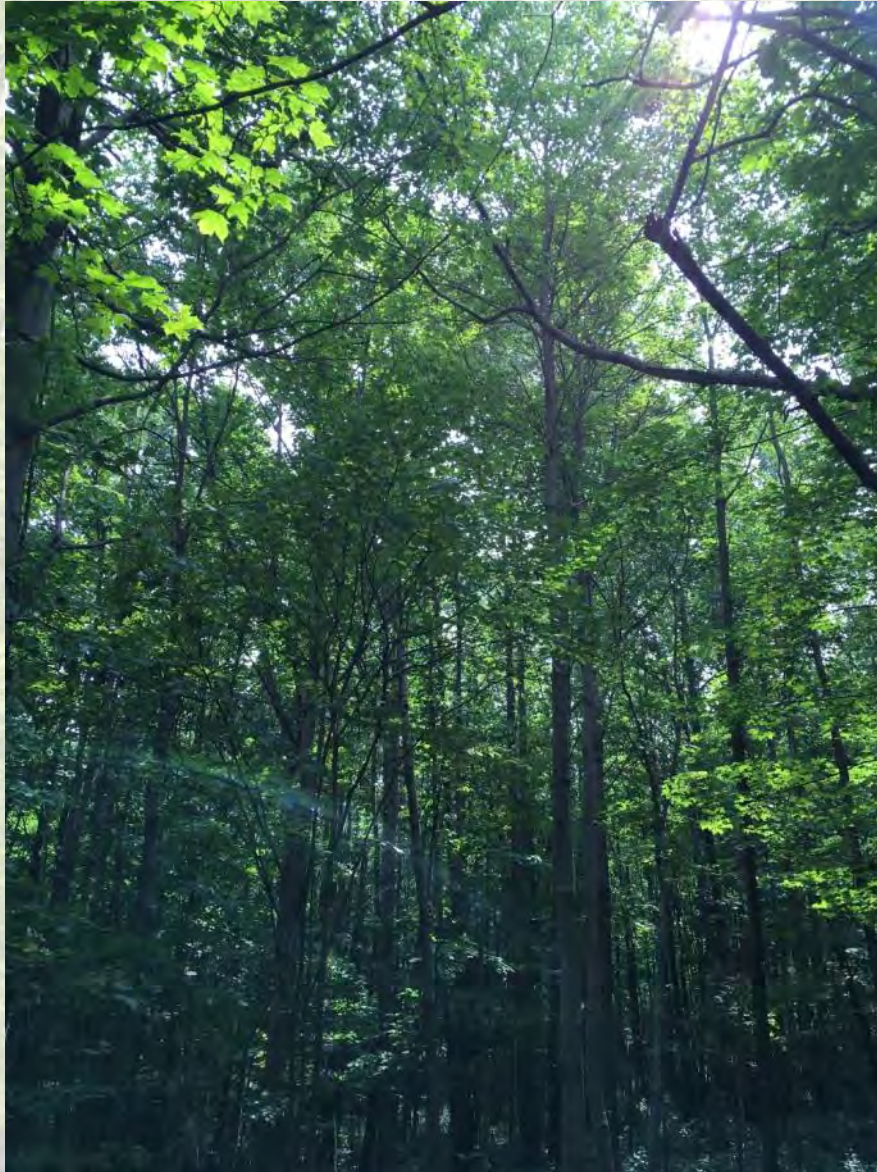
Stand #3



This stand is a candidate for conversion.

The White Pine in the center of the photo has served its purpose and it's time for the younger stand of hardwood to be released to grow.

Stand #4



Plantation 21:

- Planted with Pine in 1931.
- Thinned 1955.
- Thinned 1964.
- Overstory removal of all pine 1990.

This was a farm field. Planted to pine trees. Repeatedly thinned. No Pine Trees!

Stand #4



Conversion is complete!

- Hardwood stand is 27 years old.
- Composed of mostly poplar and maple, and others.
- Has herbaceous understory, ferns etc.

This was once a pine plantation!



The Restoring Native Hardwoods Initiative is a continuation of the work of many generations of foresters. The goal is to restore what once was here – native, naturally regenerating, hardwood forests – for ecological, environmental, and social benefits.