

A Study of a Stand of Northern Hardwoods in
Southwestern New Hampshire.

Pisgah Tract

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Harvard Forest, Jan. 14, 1948

INTRODUCTION

An area of mixed hardwood growth of unusually good quality was examined on the Pisgah Tract in Winchester, New Hampshire to determine the age and the size of the individual trees. This particular area was chosen because the stand contained trees of vastly superior quality than those of other hardwood stands in the region. This area of from six to eight acres contains a mixture in the upper crown classes of white ash, beech, red oak, basswood, red and sugar maple, yellow and black birch. The young reproduction consists almost entirely of hemlock, beech and sugar maple. Although there is evidence of some past logging operation in general area it appears as if area examined had never been clear cut. This tract has always been in forest.

PROCEDURE :

In this stand six of the larger and best formed trees were examined. Borings at breast height were made to determine the age of the trees. Five was added to the count made from the borings to secure the total age. Trees were measured with a diameter tape to find the d.b.h. Estimates were made of the total height and also of the clear length of the bole. Photographs were taken to illustrate the fine form of the trees and also to show the marked difference in the crown form of the red oak, white ash and other northern hardwoods. Some of the other large trees in the area were measured to determine the d.b.h and heights but no borings were made.

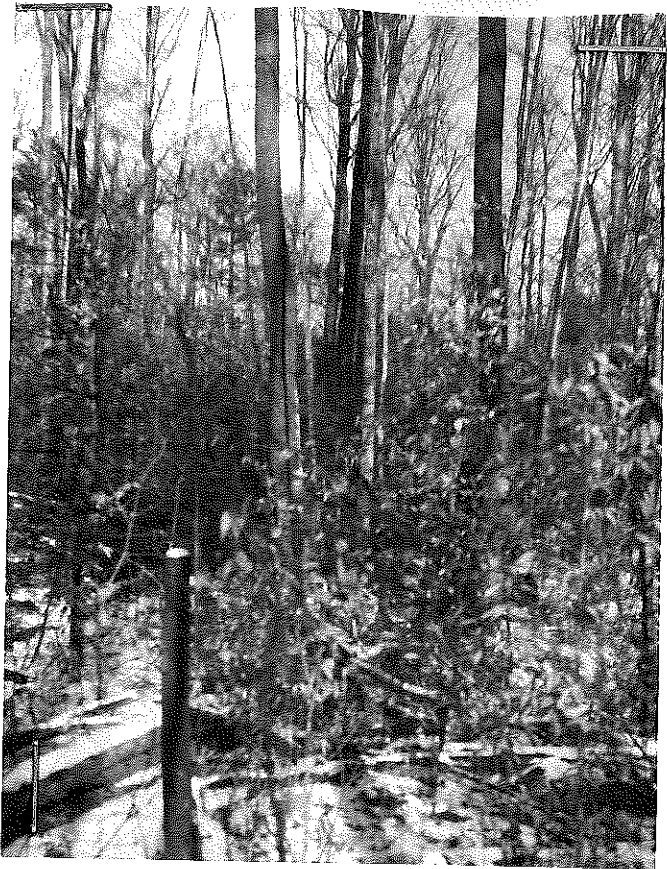


Fig.1



Fig.2

The two large trees in the center of Fig.1 are red oaks. The tree on the right is 80 feet tall with the first forty feet free of branches. The d.b.h is 13.5 inches and the age 57 years. Fig.2 shows the crowns of these two trees. It is interesting to note that these dominant red oaks are much younger than any of the other dominant trees measured.



Fig. 3



Fig. 4

The tree in the foreground of Fig. 3 is a beech. The two trees in the middle back ground are white ash and the large tree in the center of the picture in the back ground is a yellow birch. The white ash to the right is 14.5" d.b.h. and 80' tall with 60' clear length and is 120 years old.

In Fig. 4 the large tree in the foreground is a beech 25" d.b.h. This tree is 40' to the first branch and is 50' in total height the top having been blown out. The age of this tree was not determined.



Fig.5

Fig.5 shows a basswood 70' tall, 18" d.b.h and 108 years old.

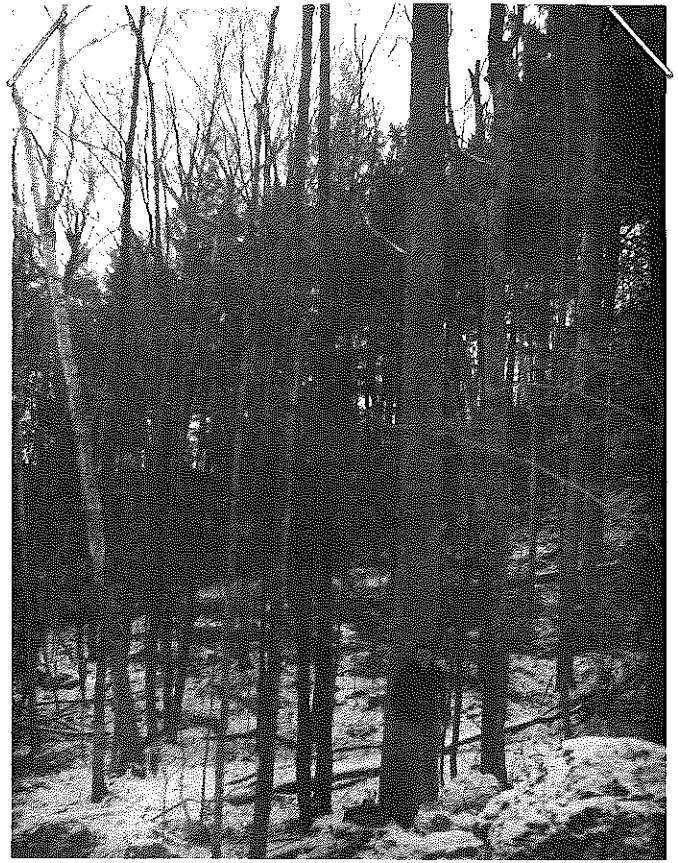


Fig.6

Fig.6. This is a white ash 19" d.b.h., 75' tall and 98 years old. This was the finest tree in the stand.



Fig.7



Fig.8

Fig.7. This photograph illustrates the tendency of the red oak to develop large spreading crowns. The branches in the red oak crown are larger in diameter and extend from the trunk more nearly at right angles than do the branches of the ash and maple. See Fig.8

Fig.8. This picture shows the crowns of a group of white ash (on the right) and a group of maples. The ash clump averages 10" d.b.h and 70' in height and are approximately 70 years old.