

FIELD SESSION
PENOBSCOT EXPERIMENTAL FOREST

Chairman: Ernst J. Schreiner

THE PENOBSCOT EXPERIMENTAL FOREST

F. R. Longwood

Research Center Leader
Northeastern Forest Experiment Station
Forest Service, U. S. Department of Agriculture

You are now on the Penobscot Experimental Forest operated by the Penobscot Forest Research Center. This 4,000 acre forest was purchased in 1950 by nine of the large wood-using industries and turned over to the Northeastern Forest Experiment Station under a 99-year lease for research in forest management.

This was a unique move in the history of American forestry in that private wood-using industries purchased land for the express purpose of turning it over to the Federal Government for research purposes. We are not only appreciative but honored as well by the opportunity to work with the companies whose names you saw on the entrance sign.

The experimental forest had been cutover several times before it was assigned to us. Logging has always been for sawlogs and, to the best of our knowledge, no pulpwood has been taken from the area. The particular area where we are now was last cut for sawlogs about 15 years ago. In this particular part of the forest the cut was not particularly heavy, only the large mature trees were removed.

The stand is, of course, uneven-aged with the main stand averaging 60 to nearly 110 years of age. Balsam fir averages 60 years, white and red spruce 85 years, pine 75 years, hemlock 110 years, and cedar 100 years of age. According to Station Paper 93, "Proposed site classification for red spruce in the Northeast", by McLintock and Bickford, the site is rated at 62. According to their classification, this is a medium quality site for red spruce, falling slightly on the low side of medium. This is somewhat above average for the experimental forest.

SCHREINER. I wish to thank Frank Longwood and the members of the Penobscot Forest Research Center for their wholehearted cooperation and advice, and for the field work they have put into preparing this sample plot.

One of the most important genetical aspects of this demonstration is the rating of individual tree quality; this requires experience with the species and with the forest type. The trees on this sample plot were rated by A.C. Hart and Grant Davis, research foresters of the Penobscot Forest Research Center. Because of Mr. Harts long experience in the spruce-fir type, I believe there will be relatively little disagreement on the tree quality ratings. At this time, I would like to ask Art to explain these quality ratings.

HART. Individual trees on the NEFTIC demonstration plot were rated numerically from 1 to 5, based on our estimate of their value as growing stock over the next 10 years. Items considered in arriving at the individual ratings were apparent tree vigor, bole form, branch habit, mechanical injuries, and butt-rot indications.

The numerical and descriptive ratings are as follows: 1 - very best; 2 - good; 3 - fair; 4 - marginal; 5 - cull.