

## REPORT OF THE NEFTIC COMMITTEE ON HARDWOOD TREE IMPROVEMENT

For the past year the Committee has been concerned primarily with the organization of a selection program of sugar maples for sugar and sap production.

After considerable discussion it was decided that instead of one overall regional committee, the project would be guided by a committee in each of the States involved. The objectives of the committees would be:

1. To stimulate the search for superior phenotypes.
2. To arrange for the inspection and location of trees reported.
3. Arrange for the registration of trees judged to be plus.

Selection criteria will be as follows: In the case of solitary trees where there are no other trees in the immediate vicinity for comparative purpose, a minimum average over the season of % sugar in sap has been set.

In sugar bushes and in roadside trees, selected individuals will be, at least 50% above the average for the stand on the road. An average is established by taking a sample of 10 trees, of uniform crown size, selected at random over the stand. Returning through the stand, 100 more trees of similar crown size are measured at random and the readings recorded. Those trees which are at least above average or below average of the 10-tree sample are suitably marked for future references. As more fundamental information is obtained regarding the effects of environment on sugar and sap production the criteria may be revised.

This spring, the Northeastern Forest Experiment Station surveyed 17 sugar bushes in the State of Vermont. Using the 10 tree 100 tree method, 1880 trees were tested. In 4 stands there were no trees found which were 50% or more above average for the stand. However, in one stand, 6 trees were found which were at least 50% above average.

During our first full year of operation in 1963, we plan to document sweet trees which are now known to sugar bush operators. We also plan to do some survey work, using the 10 tree 100 tree method. We would like to concentrate further selection efforts in those stands where the largest number of trees 5% above or below the average is found, or where the greatest deviation from the stand average occurs.

I won't go into the economic aspects of the selection program except to say that to the sugar producer, the immediate returns would be information as to whether it would pay him to rogue his bush of low producers. The Committee would get a more complete picture of what we have in the way of variation in sugar content and sap production in the Northeast.

To date, State Committees have been organized in Vermont, Maine and New Hampshire. Later this month, an organizational meeting has been scheduled in Massachusetts and favorable correspondence from New York indicates that State will also enter into the sugar maple selection program. Members of State Committees organized thus far are as follows:

Vermont -- F. M. Laing, Chairman; R. A. Farrington; A. F. Heitman;

W. W. Stone; R. T. Foulds, Jr., E. Nye; F. Elwert.

Maine -- L. P. Bissell., Chairman; C. Lombard; R. Smith.

New Hampshire -- R. P. Sloan, Chairman; V. Peterson; S. Dunn; L. Moore.

William J. Gabriel, Chairman.