

SUGAR MAPLE REGENERATION IN VERMONT'S SUGARBUSHES

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Abstract:

This project is the direct result of Tim Wilmot's Vermont-wide work with syrup producers. A number of producers have reported alarmingly few sugar maple seedlings and saplings in the forest understory. Other producers have reported excellent regeneration. The concern centers on the health and future of sugar maple in Vermont.

The North American Maple Project (NAMP) and National Forest Health Monitoring Project (NFHM) were instituted to study forest condition and sugar maple health in the US and Canada. These monitoring initiatives, however, are mainly limited to mature trees. Our study of regeneration, on 23 sugarbushes scattered throughout Vermont, augments these and other studies.

On each sugarbush we are quantifying density of seedlings and saplings, year of establishment of existing seedlings and saplings, causes of seedling and sapling injury and mortality, and year-to-year variability in production and viability of sugar maple seeds. From these data we hope to gain greater insight into the extent of the regeneration problem. We also hope to identify patterns or trends that will enable us to pursue the next step: to identify why regeneration is a problem in some sugarbushes but not in others. Ultimately, we hope to offer forest managers and syrup producers specific guidelines to counteract the regeneration problem before it is too late.