

Vermont Forest Health

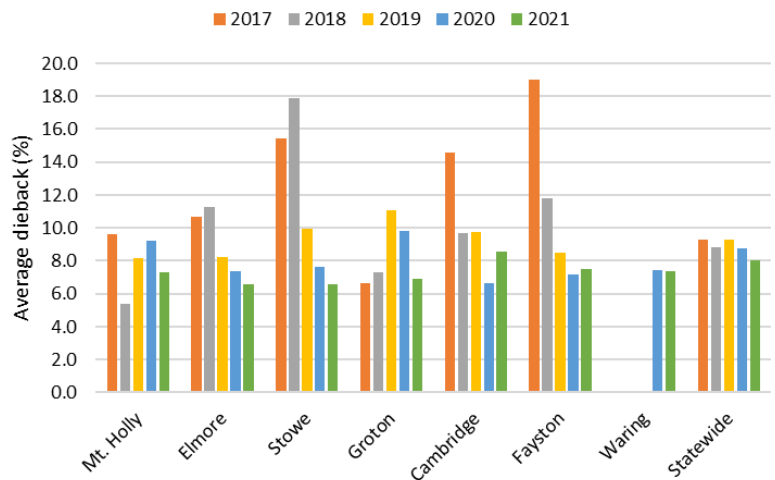
Tree Condition in Maple Sugaring Sites on State Lands: Results for 2021

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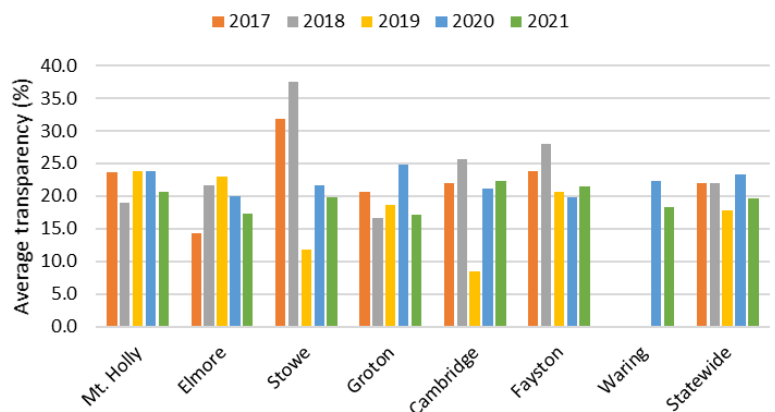
There are currently 37 sugar maple health monitoring plots statewide throughout Vermont, with seven of these occurring on state lands under license agreement for maple sugaring purposes. Each year, the crowns of sugar maples within these monitoring plots are assessed for both branch dieback and foliar transparency. Branch dieback is a measure of the amount of newly dead twigs each season, with higher ratings indicating the effects of current or past stress events on overall tree health. Foliar transparency is a measure of the amount of skylight visible through the foliated branches of a tree's live crown and averaged for the crown as a whole. This rating often reflects the current year impacts of insects, disease, or other environmental stresses.

The graphs presented here illustrate trends in both average branch dieback and average foliage transparency from 2017-2021. This period of time coincides with an outbreak of forest tent caterpillar (FTC), which began in 2016. FTC defoliation was not observed in our monitoring plots after 2018, and tree health appears to have improved from 2018. This year, branch dieback in plots on state lands averaged 7% - less than the statewide average across all 37 plots which averaged 8%. Foliar transparency declined slightly both in plots on state lands and statewide across all 37 plots, which averaged at 18% and 20%, respectively.

Dieback of Overstory Maple from Sugaring Sites on State Land



Foliar Transparency of Overstory Maple from Sugaring Sites on State Land



For more information, contact the Forest Biology Laboratory at 802-565-1585 or:

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