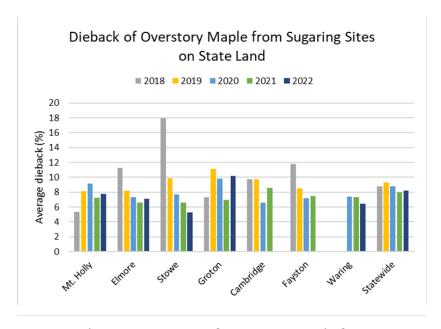
## Vermont Forest Health

## **Tree Condition in Maple Sugaring Sites on State Lands: Results for 2022**

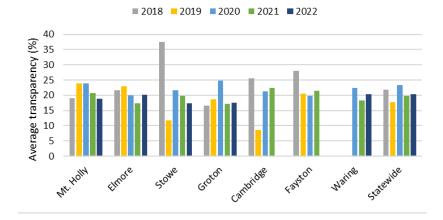
Department of Forests, Parks & Recreation January 2023 fpr.vermont.gov

There are currently 35 sugar maple health monitoring plots statewide throughout Vermont, with five 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 2018-2022. This period of time coincides with an the end of 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 35 plots which averaged 8%. Foliar transparency improved slightly in plots on state lands which averages at 19% and remained the same statewide across all 35 plots, which averaged at 20%.



Foliar Transparency of Overstory Maple from Sugaring Sites on State Land





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