



Vermont Forest Health

Tree Condition in Maple Sugaring Sites on State Lands: Results for 2015



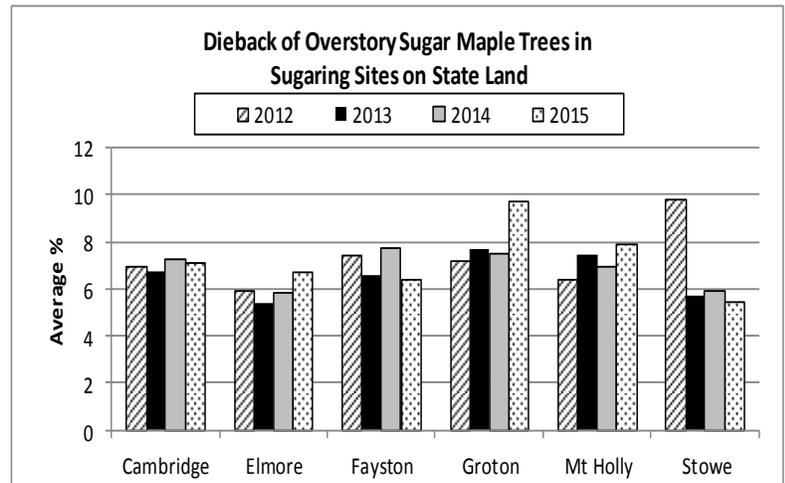
Department of Forests, Parks, & Recreation
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Results For 2015

In 2012, forest health monitoring plots were established in six sites on state lands under license agreement for maple sugaring. Plot design and measurements are the same as for the 30 other sugar maple health monitoring plots in Vermont previously established under the North American Maple Project (NAMP).

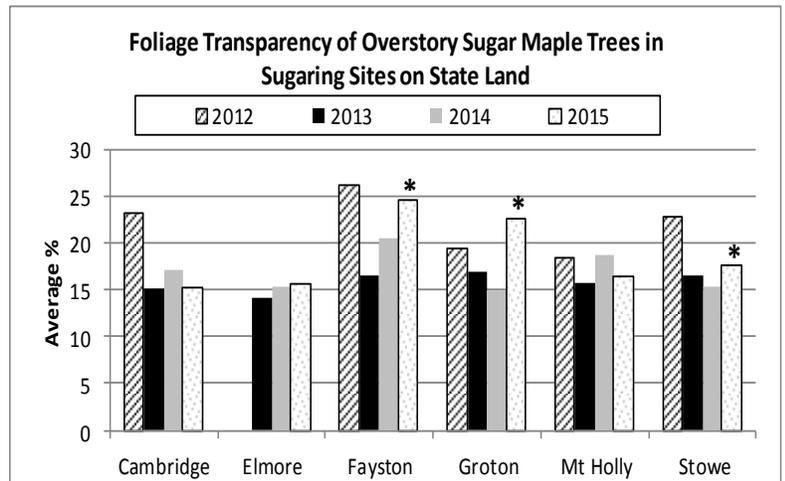
Substantial defoliation affected four of the sites in 2012 but none of the sites had significant defoliation in 2013. In 2014, two sites, Fayston and Mt. Holly, had scattered moderate defoliation, most likely caused by saddled prominent. As a consequence, the foliage transparency ratings, which indicates leaf density, showed significant increase at these two sites over 2013. And in 2015, although no specific defoliators were identified, foliage transparency increased significantly on the Fayston, Groton, and Stowe sites. Other locations in Groton showed frost damage in 2015. Only the Groton site showed an increase in crown dieback in 2015 although this was not statistically significant. No new mortality was reported.

The 2015 sugar maple condition ratings on the six sites were similar to average ratings for the 30 NAMP plots statewide, which include sugarbush and untapped maple stands scattered throughout the state. Dieback and transparency for overstory trees averaged 7.2% and 18.7%, compared to 7.0% and 18.1% for the NAMP plot maples.



Dieback evaluates new dead twigs. Higher ratings indicate current or past stress effects on tree health.

Foliage transparency evaluates the density of leaves. Higher ratings indicate thinner foliage, and reflect current year stress.



For more information, contact the Forest Biology Laboratory at 802-879-5687 or:

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