



## Northern New York Agricultural Development Program

*Farmer-Driven Research • Real-World Results • Practical Application*

Co-Chairs:

Jon Greenwood, 315-386-3231 • Joe Giroux, 518-563-7523 • Jon Rulfs, 518-572-1960

*Research news/reports/updates: [www.nnyagdev.org](http://www.nnyagdev.org) • RSS • Email/Text*



### NNYADP Maple Projects Advance Sugarbush Health, Industry Growth Toward \$10+ Million Potential

With dedicated and enterprising maple producers and sugarbush research funded by the farmer-driven Northern New York Agricultural Development Program (NNYADP), the Northern NY maple industry is steadily advancing toward its potential to be a more than \$10 million annual industry (*Growth Potential in the NNY Maple Industry, 2008, Farrell\**).

The NNYADP Maple Committee prioritizes maple research projects to assist producers with sugarbush management, improve sap yield and production efficiency, and develop value-added opportunities. The impact of projects, for example, increased the number of maple taps in NNY 26 percent from 2005 to 2011, adding more than \$1.1 million in farm-gate revenues to the regional maple economy.

A “*Get Involved with Maple: Options for Landowners*” project brochure was sent to ~7,000 NNY landowners with untapped maple trees with info on leasing land to producers, collecting sap for sale, making syrup in 2009. Within two years, the annual value of the NNY maple industry grew from \$3.5 million to more than \$5.5 million.

If NNY continues to increase its sugar maple tree utilization rate to reach that of Vermont (2.9%) its industry could grow to more than \$9 million, conservatively based on \$3/lb bulk price(\*). That economic impact increases with retail and value-added confections sales, and agri-tourism events.

**The results of NNYADP-funded research are posted at [www.nnyagdev.org](http://www.nnyagdev.org).**

Recent projects have addressed the impact of changing sap tubing size and the opportunity to extend the maple production season by processing high-value birch syrup for niche markets sale. Watch for new project work in 2018!

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**To receive NNYADP maple project results/notices: text 315-408-2841  
or email Subject Line: NNYADP Maple Results to [karalynn@gisco.net](mailto:karalynn@gisco.net)**

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*Funding for the Northern New York Agricultural Development Program is supported by the New York State Senate and administered by the NYS Department of Agriculture and Markets*



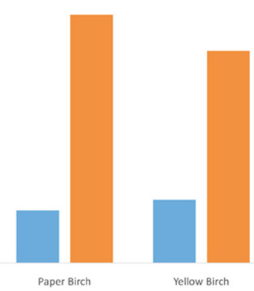
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## Results Summary of Recent NNYADP Maple & Birch Research

*Learn more in final reports posted at [www.nnyagdev.org](http://www.nnyagdev.org)*

### Maple Syrup: 3/16" or 5/16" Tubing Under Natural Flow and Artificial Vacuum?

- 3/16" interior diameter tubing systems allow for much greater & easier natural vacuum development; fill more rapidly with better adhesion of sap to itself & tubing walls; appear to have the potential to increase sap yield in tandem with vacuum pump (*more research is needed on influencing factors*).
- Using 3/16" dropline can boost vacuum at taphole with longer droplines also boosting vacuum.

### Birch Syrup: Maple Season Extension/Profit Adjunct

- High value birch syrup produced without added equipment represents an income opportunity for existing maple producers, however, success requires sufficient trees. For boiling efficiency, some producers used a central processing point.
- In first-year trials in NNY sugarbushes, at 1 site: 3/16" tubing gathered 4-12 inches of vacuum per height drop & spouts produced >20% sap (avg.); at 1 site: 5/16" spouts produced nearly 5x the sap over 3/16" spouts; and at 1 site: all gravity 5/16" tubing on paper birch produced sap sugar content as high as 1.2 brix.
- More research is underway to establish birch syrup production baseline and best practices.

**Watch for New NNYADP Maple & Birch Project Work in 2018!**

### Meet Uihlein Sugar Maple Research Forest Director Joe Orefice, 518-354-3170, [jno37@cornell.edu](mailto:jno37@cornell.edu)

Joe Orefice is the new director of Cornell's Uihlein Sugar Maple Research Forest, a 6000-tap maple and birch sugarbush and sugarhouse in Lake Placid. He earned a Ph.D. in Natural Resources from the University of New Hampshire, Master of Forestry from Yale University, and a B.S. in Forestry from the University of Maine.

His experience includes work as a state forester, farmer, and 8 years on the forestry faculty at Paul Smith's College. He grew up in Connecticut on a small farm, tapping ~100 maple trees. In 2018, Joe will manage a NNYADP-funded project evaluating sap yield by varying tapping schedules for maple and birch syrup production in collaboration with Paul Smith's College.



*"The Northern New York region has tremendous potential to grow its maple industry. I look forward to helping producers keep their trees healthy using the best sugarbush management practices." — Dr. Joe Orefice*