

Maple Mainline

Vermont Maple Conferences January 3, 17, 24, 2015



The University of Vermont Extension, Addison County Maple Sugarmakers Association and Vermont Maple Sugar Makers' Association are pleased to offer the 12th annual Vermont Maple Conferences on Saturday January 3rd, 17th and 24th, 2015. The conferences are educational meetings held for the purpose of bringing the latest information and research findings about forest management, sap collection, syrup production, quality control, and marketing to sugarmakers in Vermont and surrounding regions. These all day meetings, which are designed to provide education for maple producers of all levels of skill and experience, are open to the public. Classes are taught by scientists, natural resource professionals and sugarmakers from around the state. Meetings also feature a trade show with vendors displaying maple related equipment and a lunch with a maple theme. These meetings are widely perceived to be among the best educational opportunities for sugarmakers in the US and Canada.

Please Note:

The enclosed registration form has two parts. Please fill out the appropriate half, depending on whether you wish to attend the Jan. 17th meeting, or either the Jan. 3rd or 24th meetings. Note that the meeting day schedules are different, that the checks are made out to different organizations, and the forms are sent to different addresses. Attendees have the option to register and pay online for the Bellows Falls and Hyde Park Conferences at <http://vermontmaple.org/vermont-maple-conferences/> **VMSMA Members will receive free registration at either the Bellows Falls or Hyde Park Conference if registrations are posted by December 18th (BF) or January 12th (HP), and non-VMSMA employees and family will received a discounted rate if registering on the same form..**

Sat., Jan. 3rd, Bellows Falls Union High School

Location: off US Rt. 5, just south of Bellows Falls. Lunch will feature maple cured baked ham with all the fixings.

Sat., Jan. 17, Middlebury Union H.S., Middlebury

Location: off US Rt. 7 just south of the village. Lunch will feature roast pork with all the fixings with vegetarian option.

Sat., Jan 24, Lamoille Union High School, Hyde Park

Location: West side entrance to Lamoille Union High School, US Rt. 15 in Hyde Park. Lunch will be catered by the Culinary Arts program and will feature Maple Bourbon Roast Pork with all the fixings.

Pre-Registrations must be postmarked by: December 18 (Bellows Falls), January 10th (Middlebury) and January 12th (Hyde Park). Thank You! Registrations postmarked *by these dates* will be assured of a meal, if selected and paid for. Lunch for walk-ins or registrations postmarked *after these dates* will be served on a first come, first served basis. Please help us by registering early.

If you require a disability-related accommodation to participate in this program, please notify Mary Croft at 802-763-7435 for the BF or HP meetings, or Moe Rheume at 802-352-4556 for the Middlebury meeting.

Please Note: All conference sites are on school property. A strict **NO SMOKING** policy must be followed.

You are welcome to attend all of the various meetings. We have developed a very inclusive agenda, with classes for all levels. We sincerely hope this program will be beneficial to you and your maple operation. **A drop box for conference evaluations will be provided as you exit.**



University of Vermont Extension, 617 Comstock Rd, Suite 5

Berlin, VT 05602 ~ 802-223-2389

Toll free: 1-866-860-1382; Fax: 802-223-6500

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, Vermont. University of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status.

A Message From Matt Gordon, Vermont Maple Sugar Makers' Association Executive Director:

2014 was predicted by many to be a down year when we were in the midst of a long, cold winter and spring. In the end, Vermont overall had a very good year, a testament to the hard work, expansion, and modernization we see every day. One element of that continued success is the access to information through events like our Maple Conferences.

VMSMA, in conjunction with UVM Extension, is again offering two conferences to bring you the latest information on maple research, production methods, and marketing syrup. Like the past few years, these are being held in Bellows Falls and Hyde Park. A third conference, sponsored by the Addison County Sugarmakers Association, is being held in Middlebury.

If you are a VMSMA member in 2015, the registration fee for either the Bellows Falls or Hyde Park conference will be waived and any family members or employees are eligible to register for a discounted rate. The schedule for all three conferences are full of great seminars, including information on where the industry is currently positioned with the synchronized grading standards.

VMSMA had a busy 2014 and is looking forward to some exciting projects in the year, and years, ahead. We are continuing our efforts to protect the use of the word maple as a designation on food products by working with both state and federal regulators but also working to change consumer preference. We firmly believe that such practices must stop and that maple must not become another generic flavor attached to food products. We are also planning to launch an effort to reinvigorate how VMSMA and our partner organizations promote and brand Vermont Maple Syrup. With the introduction of our new grading system and growing interest in pure maple syrup, now is the perfect time to be revitalizing our collective promotional materials, packaging, and branding for Pure Vermont Maple Syrup.

Good luck in 2015 and happy sugaring!

Matt Gordon

Daily Schedule for Bellows Falls and Lamoille Union H.S. —Jan 3 & 24

7:30 ~ Registration opens; Coffee and Donuts
8:30 – 10:10 ~ Markets, Marketing, and Vermont Maple in 2015.
10:20 – 11:10 ~ Session II
11:20 – 12:10 ~ Session III
12:10 – 1:30 ~ Lunch
1:40 – 2:30 ~ Session IV
2:40 – 3:30 ~ Session V
Turn in evaluations; have a safe trip home.

Opening Auditorium Session: Bellows Falls and Hyde Park

This session will concentrate on marketing, the state of the industry as seen by the packers, and some important changes and possible trends for Vermont Maple. Some of the presenters will include: **Henry Marckres, VT Agency of Agriculture** ~ regulations for labeling syrup as of January 1, 2015, especially for out-of state sales, and the VT GMO labeling law for 2016 in relation to maple. **Matt Gordon, Executive Director of the VMSMA** ~ **The opportunities and challenges for funding marketing initiatives in maple.** Following these discussions, there will be a of panel maple packers including **David Marvin of Butternut Mt. Farm, Mark Bigelow of Maple Grove Farms of VT and Bruce Bascom of Bascom Maple Farms** to discuss the current state of the maple industry, prices, US and Canadian production, and to speculate on the future of the maple industry. Finally, there will be a presentation on marketing by Mark Hastings, who many of you read about in the Maple News after he successfully opened a retail store to sell maple and other farm products in downtown Brooklyn (a presentation about the challenges of doing that will be given during the concurrent sessions): **Realizing the entire value chain, from tap hole to retail cash drawer** ~ **Mark Hastings, Windham County Sugarmaker.** Mark Hastings has spent his entire business life in sales & marketing. After a few years as a sugar farmer he came to understand the need to extract more of the value chain. Today's world is tremendously competitive and requires 1st market approaches to the sales success of any product.

CONCURRENT SESSIONS AT BELLOWS FALLS AND HYDE PARK:

The Challenges And Opportunities Of Opening A Retail Business In New York City ~ Mark Hastings Windham County Sugarmaker. After buying the old VMSMA mobile sugarhouse, Mark Hastings set up a roadside farm stand at exit 1 in Brattleboro. That business took him to opening up a maple focused farm store and soda fountain on one of the trendiest streets in Brooklyn, NY. Mark will present that journey as he tapped into the "Know your Farmer" movement running through the food world.

Effects Of Tubing Cleaning Practices On Sap Yields ~ Dr. Abby Van Den Berg, Proctor Maple Research Center. Which tubing cleaning practice results in the most improved sap yields, at the lowest cost? And does any practice improve yields as much as replacing spouts or droplines? This presentation will discuss the results of research on the effects of tubing sanitation and spout/tubing replacement practices on sap yields, and the relative costs of each strategy.

Recent Studies to Improve Vacuum in Tubing Systems ~ Dr. Tim Perkins, Director, UVM Proctor Maple Research Center. Sap flow from maple trees is greatly enhanced by vacuum, with yield increasing approximately 5-7% with each inch of vacuum added. Several studies at the Proctor Center conducted over the past five years have investigated possible methods to improve vacuum transfer in maple pipeline collection systems. This presentation will summarize the results of these projects.

Sap Flow and Sap Sweetness - How, Why and What Influences Them? ~ Dr. Tim Perkins, Director, UVM Proctor Maple Research Center. Maple producers rely greatly upon the development of pressure in maple trees to produce sweet sap to harvest. This presentation will explain the phenomenon of sap flow as well as the various factors that influence flow and yield as well as sap sugar content both before and during the spring season.

Sugarbush Management Techniques ~ Nancy Patch, Franklin Grand Isle County Forester. A description of forest management techniques to apply to sugarbushes, including tending the forests, the use

of even-aged, and uneven-aged management; as well as harvest operations and contracts.

Use Value Appraisal (UVA) Standards for Sugarbush Health: Nancy Patch, Franklin-Grand Isle County Forester with VT Forests, Parks & Recreation. The UVA program recognizes the unique management aspects of a sugarbush to maintain their health and productivity. Learn how to recognize a healthy bush, and how to minimize stress keeping the forest healthy for the long term.

An Inside Look at Maple Finances Mark Cannella/Betsy Miller, UVM Extension.

The Maple Business Benchmark has completed one year of detailed financial analysis with Vermont maple operations. This presentation will share results on the investment requirements, cost of production and profitability for maple operations in 2013. Get an inside look at financial performance for operations from 3k taps to over 20k taps and see how the benchmark program provides individual financial analysis to support business decisions like adjusting prices to cover costs, evaluating new investments and managing expenses.

Sap Extractors ~ Keith Wakefield, CDL (Bellows Falls) and Carl Lapierre, Lapierre Equipment (Hyde Park). Learn how to choose the right maple sap extractor for optimal results.

Proper use of Sap and Syrup Hydrometers, and Grade your own syrup ~ Henry Marckres, VT Agency of Agriculture, Foods and Markets. Maple expert Henry Marckres will explain some of the common mistakes made in using hydrometers. Additionally, Henry invites you to bring in the syrup samples that you may have questions about, in order to learn more about proper grading techniques.

Maple Pumps ~ Glen Goodrich, Washington Cty. Sugarmaker. Glen will cover the various kinds of pumps used in maple operations, including vacuum and transfer pumps, and discuss their principles of operation, applications, advantages and disadvantages.

Modern Vacuum Systems ~ Glen Goodrich, Washington Cty. Sugarmaker (Bellows Falls) and J.R. Sloan, Franklin Cty. Sugarmaker (Hyde Park). Learn the latest techniques for maximizing sap collection in a high vacuum tubing system.

3/16" Gravity tubing for beginners ~ Tim Wilmot, UVM Extension. A hands-on demonstration of the best techniques for setting up a gravity tubing system, using the latest materials and techniques with 3/16" tubing and fittings to develop high vacuum without a pump on a sloped site.

The Bird-Friendly Maple Project ~ Steve Hagenbuch, Audubon Vermont. Vermont's maple sugarbushes not only produce the best maple syrup in the world, they also present an opportunity to provide high-quality nesting habitat for migratory songbirds. Learn more about the project, the birds that nest in sugarbushes, and how to plan for and implement sugarbush management activities that can increase habitat quality, enhance the health and long-term sustainability of the forest, and promote and potentially increase market visibility of pure maple products.

Techniques for the Beginning and Backyard Sugarmaker ~ George Cook, UVM Extension Maple Specialist. A 2 hour presentation; Part I will cover topics from identifying the crop trees in the woods to the selection of the fuel to fire the arch. In the mix, you'll find sugarbush management, tapping practices, and collection and storage of sap, along with tools, building and equipment needs. Part II will cover the evaporation and processing of sap to the final finishing of maple syrup, including filtering, grading and packing and a discussion of off-flavors

CLASSES OFFERED AT BELLOWS FALLS ONLY:

Growth rates of trees tapped with high vacuum levels ~ Dr. Abby van den Berg, Proctor Maple Research Center. This presentation will discuss research conducted to determine the growth rates of trees tapped with high vacuum levels, and the minimum growth rates needed for tapping to be sustainable.

Managing crystal size in value added maple products ~ Stephen Childs, Cornell Maple Program. The taste of maple value added products is very important but how that product feels in the mouth of the consumer also plays a very important role in the products acceptance and continued purchase. This session will take an in-depth look at what factors

influence the formation of sugar crystals in maple products and what you can do to be in control of that process.

Making Granulated Maple Sugar and some fine points in making Maple Cotton Candy ~ Stephen Childs, Cornell Maple Program. A demonstration of making maple granulated sugar and maple cotton.

Ticks and Other Forest Pests. Jim Esden, forester for the Vermont Department of Forests, Parks and Recreation. Jim, who works with the Vermont Forest Health Program, and who like many New England foresters has had Lyme Disease, will talk about ticks and tick bite prevention, and will also share the latest information on Emerald Ash Borers, Asian Longhorned Beetles, and Hemlock Woolly Adelgids.

The Economics of Buying & Selling Sap ~ Michael Farrell, Cornell Maple Program. Purchasing sap can be one of the most profitable ways of expanding syrup production. This workshop covers everything you need to know on how to price raw sap when it is sold between someone who gathers the sap and a sugarmaker who processes it into syrup. You will learn how to determine whether buying/selling sap is a profitable venture and the finer points of getting into the sap buying business.

Making the Most of Your Woodland ~ Michael Farrell, Cornell Maple Program. This workshop covers all of the other products that you can harvest and grow in your sugarbush and associated woodlands. You will learn about opportunities with ginseng, goldenseal, mushrooms, leeks, holiday greenery, taphole maple lumber, and more.

25 Ways to Develop a More Enjoyable, Productive, and Profitable Sugaring Operation ~ Michael Farrell, Cornell Maple Program. All of us have room to improve upon and grow our sugaring operations in a more profitable and productive manner. This session highlights at least 25 things you can do to increase your bottom line while also gaining more enjoyment and satisfaction from your sugaring operation.

CLASSES OFFERED AT HYDE PARK ONLY:

The Psychology of Social Media ~ Jennifer Williams, Marketing Professional. A presentation on the best uses of social media (Facebook etc.) in order to attract buyers to your maple website.

Pumping Sap: Panel Discussion. Pump expert Mike Flewelling, from F.W. Webb will provide technical advice in regard to pumping problems and situations posed by sugarmakers Peter Purinton, Brian Stowe (Moderator) and others.

RO Membrane Principle and Cleaning ~ Helene Lapierre. Helene Lapierre is in charge of the cleaning of thousands of membranes at the Lapierre plant in Canada. She will discuss RO membrane principle, testing and performance, troubleshooting, and membrane do's and don'ts.

Do You Know You Can Produce The Taste You Want For Your Maple Syrup ~ Joel Boutin Quebec Extension Specialist. Joel Boutin is a sugarmaker and an agricultural technician who specializes in maple, serving as a consultant to over 100 producers in his part of Quebec, many with large operations. He will discuss methods for improving the flavor of "defect" syrup, as well as methods to influence the flavor of your table syrup.

Managing Your Sugar House To Facilitate Your Work ~ Joel Boutin, Quebec Extension Specialist. Joel Boutin's presentation will focus on how sugarmakers can organize their sugarhouse and best facilitate their work there by choosing equipment that fits together properly.

DAILY SCHEDULE FOR MIDDLEBURY HIGH SCHOOL ON JANUARY 11

Schedule

8:00 – 8:45 Registration – Coffee & Donuts
9:00 – 10:15 Welcome (in Auditorium)
State of Industry Discussion
10:30 – 11:45 Session I
11:45 – 1:30 Lunch & Trade Show
1:30 – 2:45 Session II
3:00 – 4:15 Session III
4:15 - Have a Save Trip Home

Effective Tubing Design and Setup ~ J. R. Sloan, Green Mountain Mainlines. Learn how to get the best out of your tubing set-up. From mainlines to drops, learn the best practices of how to set up an efficient tubing/vacuum system. Get tips, whether your woods are flat, steep or somewhere in between.

Spout Technology – Hands on Experience ~ Glen Goodrich. Deciding the best type of spouts to use in your woods is a challenge. Glen Goodrich, of Cabot, will spend this session discussing his experience with a variety of spouts and spout "accessories". He'll help you sort out the hype and the marketing to help you understand the best products.

An Inside Look at Maple Finances ~ Mark Cannella, Betsy Miller, Chris Lindgren, UVM Extension. The Maple Business Benchmark has completed one year of detailed financial analysis with VT maple operations, ranging from 3,000 to 20,000 taps. This session will share results on investment requirements, cost of production and profitability. Attendees will see how the benchmark program provides analysis to support business decisions like adjusting prices to cover costs, evaluating new investments and managing expenses.

Tapping Birch and Walnut Trees for Syrup Production ~ Michael Farrell, Cornell Maple Program. This workshop explores the pros and cons of tapping alternative tree species, such as birches and walnuts, for sap and syrup production. You will learn about the differences in sap collection and processing as well as marketing opportunities for these unique products.

The Economics of Buying & Selling Sap ~ Michael Farrell, Cornell Maple Program. Purchasing sap can be one of the most profitable ways of expanding syrup production. This workshop covers everything you need to know on how to price raw sap when it is sold between someone who gathers the sap and a sugarmaker who processes it into syrup. You will learn how to determine whether buying/selling sap is a profitable venture and the finer points of getting into the sap buying business.

How to Make Money at Sugaring ~ Mike Farrell Cornell Maple Program. Everyone has room to improve upon and grow our sugaring operations in a

more profitable and productive manner. This session highlights a wide variety of steps you can take to increase your bottom line from sugarbush management, sap collection and processing, and marketing of the final products.

Sap Tracking ~ Nick Atherton, CDL. Do you know what's going on in your woods? New sap tracking technology allows you to "see" into the woods from the house, car, or even in bed! Nick Atherton will present innovative systems - GPS programs, vacuum monitoring and tank sensors that can take the sleepless nights and long drives into the woods out of your sugaring operation.

How Do You Boil? ~ Representatives from Dominion & Grimm. Boiling with oil, wood, used cooking oil? A representative from D & G will discuss boiling with electricity as it compares to using other methods. Find out if you can boil with the sun!

Effects of tubing cleaning practices on sap yields ~ Dr. Abby van den Berg, Proctor Maple Research Center. Which tubing cleaning practice results in the most improved sap yields, at the lowest cost? And does any practice improve yields as much as replacing spouts or droplines? This presentation will discuss the results of research on the effects of tubing sanitation and spout/tubing replacement practices on sap yields, and the relative costs of each strategy.

3/16" Tubing? A Roundtable Discussion ~ Andy Hutchison, Moderator. Several years of use have shown great promise in getting good vacuum without the equipment when using 3/16" tubing. The roundtable discussion will help answer questions and cover issues when using 3/16" tubing.

Techniques for the Beginning and Backyard Sugarmaker ~ George Cook, UVM Extension Maple Specialist. A 2 hour presentation; Part 1 will cover topics from identifying the crop trees in the woods to the selection of the fuel to fire the arch. In the mix, you'll find sugarbush management, tapping practices, and collection and storage of sap, along with tools, building and equipment needs. Part II will cover the evaporation and processing of sap to the final finishing of maple syrup, including filtering, grading and packing and a discussion of off-flavors

Good to The Last Drop ~ JR Sloan. JR makes thousands of gallons of syrup every year, he'll discuss his methods of turning every drop of sap into syrup. Learn how to turn your cleaning processes into syrup production instead of dumping it down the drain.

"Game of Logging" ~ Allen Sands, Northeast Woodland Training Program. Woods safety is no game - each year on average 2 sugarmakers are killed in accidents in the woods, these accidents do not need to happen. Allen will instruct participants how to look and assess the dangers and hazards in the woods.

Syrup Grading ~ Henry Marckres, VT Agency of Agriculture. You have worked to make the syrup, now learn how to properly grade your products. Correct grades can help you get the most out of your hard work. Discover some of the pitfalls in grading, canning and storage of syrup.



The
UNIVERSITY
of **VERMONT**

EXTENSION

Tim Wilmot

UVM Extension Maple Specialist

Mercury Thermometer Exchange

There are still some digital thermometers available for exchange with mercury thermometers. The goal is to get mercury out of the environment and use in maple production.

Contact your local solid waste district to exchange your thermometers. If they do not have any, contact: Henry Marckres, Agency of Agriculture, at 802-828-3458

**Maple Conference at Middlebury Union High School
Saturday, January 17, 2015**

~ Sponsored by the Addison County Sugarmakers Association ~

Name _____
 Operation Name: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____ - _____ - _____
 Email: _____
 Name(s) Attending: _____

Pre-Registration is \$25 per person if **postmarked by Jan 10**; \$35 per person at the door. **Please Note:** Registration fee **DOES** include lunch. If you wish to just attend the meeting the cost is \$10 if pre-registered; \$20 at the door.

Number of attendees (**meeting and lunch**) _____ x \$25.00 = _____
 Number of attendees (**meeting only**) _____ x \$10.00 = _____
 Total Enclosed _____

Checks payable to: **ACSMA**. Return to Barb Rainville, Sec/Treas. ACSMA 598 Browns Rd, Lincoln, VT 05443.
 For more information contact: Moe Rheume ACSMA President, 802-352-4556 or Barb Rainville 802-453-5797.

To request a disability-related accommodation to participate in this program, please contact Moe Rheume at 802-352-4556 by January 10th, 2014 so we may assist you.

**Maple Conferences at Bellows Falls H.S., Saturday, Jan. 3
and Lamoille Union H.S., Hyde Park, Saturday Jan. 24, 2015**

~ Sponsored by UVM Extension and the Vermont Maple Sugar Makers' Association ~

Name: _____
 Address: _____
 Town: _____
 State: _____ ZIP: _____
 Phone: _____
 Email: _____

Free admission to either the B.F. or H.P. conference for all VMSMA members if registration is postmarked by 12/18 (Bellows Falls) or 1/12 (Hyde Park)

Additional attendance registrations can be purchased at the reduced membership rate of \$20 per attendee for family members and employees. **Food is not included in registration. Should you wish to stay for lunch, please purchase a meal for each attendee, including free admissions.**

Bellows Falls 1/3/15

Family and employees _____ x \$20 = _____
 Non-VMSMA members _____ x \$30 = _____
 Number of youth _____ x \$15 = _____
 Number of meals _____ x \$18 = _____
 Others Attending: _____

Hyde Park 1/24/15

Family and employees _____ x \$20 = _____
 Non-VMSMA members _____ x \$30 = _____
 Number of youth _____ x \$15 = _____
 Number of meals _____ x \$18 = _____
 Others Attending: _____

Please make checks payable to VMSMA
 Mail to 491 E. Barnard Rd., So.Royalton, VT 05068

Total Due: _____

OPTION: Register and pay ONLINE <http://vermontmaple.org/vermont-maple-conferences/>

To request a disability-related accommodation to participate in this program, please contact Mary Croft at 802-763-7435 by December 18th, 2014 so we may assist you.

**The University of Vermont
UVM Extension
617 Comstock Rd. Suite 5
Berlin, VT 05602-9194**

2015 Maple Conference Information Inside

2014 Vermont Maple Health Highlights

Reported by the Vermont Department of Forests, Parks, and Recreation, November, 2014

The most striking highlight regarding sugar maple health is that it was a year with remarkably few foliage problems. Levels of hardwood fungal leaf diseases, which cause foliage to turn brown in mid- to late summer, plummeted from recent years. In 2014, only 6150 acres of damage by these diseases were mapped statewide, compared to 127,628 acres in 2013.

There were many reports of saddled prominent caterpillars, but defoliation was limited. There may still be a threat of defoliation in 2015. Sugarbushes should be monitored for this native insect in July and early August. Another defoliator to watch for next year is forest tent caterpillar, since our moth catches in monitoring traps increased from previous years.

Asian longhorned beetle is not known to occur in Vermont, and none of these beetles were caught in the traps that were used to monitor for this insect in 20 high risk locations within the state. The insect has been declared to be eradicated in Boston. In Worcester, the delineation survey is complete, and the quarantine boundary remains the same. 30,000 trees have been replanted. Elsewhere, survey and eradication work continue, including the areas on Long Island and near Toronto that were detected last year, and the infestation in southwestern Ohio. To reduce the risk of spreading Asian longhorned beetle and other wood-borne pests, Act 112 was signed in spring 2014 requiring regulations on importing untreated firewood by summer 2015. A draft firewood quarantine should be available for public comment in the winter.

For assistance in identifying pests or on-site evaluations, or further details, contact the Forest Biology Lab at 802-879-5687 or your County Forester.