

# Maple Mainline

## Vermont Maple Conferences January 14, 21, February 4



The University of Vermont Extension, Addison County Maple Sugarmakers Association and Vermont Maple Syrup Makers' Association are pleased to offer the 9th annual Vermont Maple Conferences on Saturday January 14 and 21 and Saturday February 4, 2012. 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. 14<sup>th</sup> meeting, or either the Jan. 21<sup>nd</sup> or Feb. 4<sup>th</sup> 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. Thank you!

**Registration tables** will be set up from 7:30 am through noontime, with coffee & donuts &/or pastries. The trade show will also be open at that time.

UVM Extension helps individuals and communities put research-based knowledge to work.



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### **Sat., Jan. 14, Middlebury Union H.S., Middlebury**

Location: off US Rt. 7 just south of the village. Lunch will feature a ham or pork roast dinner with vegetarian option and maple dessert.

### **Sat., Jan. 21, 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.

### **Sat., Feb. 4, Bellows Falls Union High School**

Location: off US Rt. 5, just south of Bellows Falls. Lunch will feature ham dinner with salad & desert by the Freshman class & parents.

**Pre-Registrations** must be **postmarked** by: December 31 (Middlebury) or January 7 (B.F. and H.P). 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.

Special needs: If you require an accommodation to participate in this program, please notify Mary Croft, secretary/treasurer of the VMSMA, at 802-763-7435

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.**

## **A Message From David Marvin, President of Butternut Mountain Farm**

Dear Fellow Sugarmaker,

As I am sure you know, the Vermont Maple Industry Council has endorsed a voluntary certification program. We envision a simple, common sense and practical approach to food safety principles for sugarmakers to follow, which will provide consumer assurance and fulfill the growing requirements of those who sell through mass market channels. Our proposed standards can be found at <http://www.vermontmaple.org/sugarmakers.php> This program would be open to anyone, although it will be most valuable to producers of bulk syrup selling to processors who need this certified supply. We think a program conducted by the Vermont Agency of Agriculture and supervised by Secretary Ross and consumer protection Chief Henry Marckres would be ideal since they understand our business and would provide an educational as well as regulatory approach to a certification program. We hope you agree and support this program, which provides as yet more evidence that Vermont maple syrup meets the highest standards in the world and is deserving of our heritage.

David Marvin

### **Daily Schedule for Lamoille Union and Bellows Falls H.S. —Jan. 21 & Feb. 4**

7:30 ~ Registration opens; Coffee and Donuts  
8:30 – 8:45 ~ Welcome (Auditorium)  
8:45 – 9:20 ~ Quality Assurance (Auditorium)  
9:30 – 10:20 ~ Session I  
10:30 – 11:20 ~ Session II  
11:30 – 12:20 ~Session III  
12:20 – 1:20 ~ Lunch  
1:30 – 2:20 ~ Session IV  
2:30 – 3:20 ~ Session V

Turn in evaluations; have a safe trip home.

**Guaranteeing Food Safety ~ Ellie Valentine, Quality Assurance Administrator for Butternut Mountain Farm (Hyde Park) and Henry Marckres, Chief, Consumer Protection, VT Agency of Ag. (Bellows Falls).** Learn practical tips and low-cost upgrades to help ensure the safety of your product. Food allergens, appropriate storage

containers for sap and syrup, chemical hazards, and record keeping practices will all be discussed.

**Two Taps Vs. One: a Look at Sap Yields ~ Tim Wilmot, UVM Extension Maple Specialist.** Tapping guidelines emphasize restrictions in the number of taps in order to reduce wounding, but what about the potential gain in sap from adding a second tap? This study examined the sap yield under vacuum from one tap vs. two in trees averaging 16”-19” in diameter.

**Customer Relations ~ Steve Wheeler, Orleans County Sugarmaker.** So you’re working on building your mail order list, and you have a snazzy new website—your focus should be not *only* on attracting new customers, but *also* keeping old ones. Steve will share some tips on how to build relationships with customers and increase your reorders.

**Tapping techniques ~ Panel Discussion.** Panelists will share tips that increase the quality and speed of tapping, for example: which drill and drill bit works best for you? Do you tap in a pattern, or how do you choose the best place for the tap hole? What do you bring with you when you head out to start tapping. Panelists at one or both meetings will include Tom Branon, Glen Goodrich, Mark Hastings, Mark Isselhardt, Jim Richardson, Doug Rose, Russell Senesac, and Brian Stowe

**How to be Successful in Getting a Farm Loan ~ Tom St. Pierre (HP) and Chris Bessette (BF), both of Yankee Farm Credit.** What to expect when applying for a loan to finance your maple sugaring operation. The presentation will include a brief overview of the financial information required plus collateral and insurance requirements.

**Impacts of Reverse Osmosis on Syrup Quality and Flavor ~ Abby van den Berg and Mark Isselhardt, Proctor Maple Research Center.** The use of RO can substantially increase the speed, efficiency, and profitability of processing sap into syrup. However, it is sometimes asked whether the use of RO has any impact on the quality or properties of the syrup produced. Results will be presented of an experiment in which the composition and flavor of syrup produced simultaneously from raw sap and the same sap concentrated to 8% by RO were compared.



**The New Maple Grading System and Identifying Maple Off-Flavors ~ Henry Marckres, VT Agency of Ag.** A new international maple grading system is expected to be in place by 2013. Henry Marckres will explain how the system will work and all the legal ramifications involved. He will also discuss and pass out the “map of maple-off flavors” which has new descriptors that have been developed to help producers identify possible off-flavors in their syrup.

**Update on Current Maple Research ~ Tim Perkins, Director, UVM Proctor Maple Research Center.** Several studies at the Proctor Center focus on ways to increase sap yields in vacuum tubing systems. This presentation will describe current work examining air (vacuum) and sap transfer in maple tubing.

**Taphole Sanitation: How it Affects Sap Yield ~ Tim Perkins.** Reducing microbial contamination of tapholes results in substantial increases in sap production. This presentation will summarize work done over the past 5 years examining the effects of different strategies for spout and tubing replacement on sap yield, including an economic analysis of the costs and benefits of different types of changes.

*Note: due to scheduling conflicts, Tim Perkins will not be at the Hyde Park and Bellows Falls conferences; his presentations will be via video.*

**Sugarbush leases ~ Dave Mance, Bennington County Sugarmaker.** A discussion of why a lease is important, what should be included in any lease, how to protect both the landowner and the sugarmaker, and some potential pitfalls of entering into a lease rather than just having an informal agreement—plus ideas on lease rates, and how to determine what is fair. David Mance is not a lawyer so the information presented

will reflect his experience and knowledge as a consultant to landowners and as a lessee of a sugarbush. **Bellows Falls only.**

**Roads in the Sugarbush. Tim Morton (HP) and Dave Wilcox (BF), both of VT Agency of Forests, Parks and Rec.** Sugarmakers need access into their woods to install tubing, bring in logging equipment, check lines, collect sap, etc. Roads are easily damaged—those on steep hillsides are vulnerable to flash floods, while springtime road use often happens when the ground is saturated. Learn the essentials of design, construction and maintenance that apply to everything from ATV access to truck roads, in order to build and keep your roads for years of service.

**Impact of Tubing and New Technologies on Maple Syrup Flavor ~ Joel Boutin Extension Specialist from Quebec.** Now, we can make more syrup than in the past, we can do it more easily and more rapidly, but new technologies have an impact on the taste of this new type of maple syrup. Do we have some control on the final product or not? **Hyde Park only.**



Tim Wilmot, UVM Extension, will discuss how he has gotten 27” vacuum using new materials for gravity tubing.

**High Vacuum Without a Pump ~ Tim Wilmot, UVM Extension.** The sap yield from gravity tubing is typically about half that of a system using a modern vacuum pump; however, there may be a better way to collect sap using gravity. This presentation will show results of a pilot study illustrating new methods and materials which can, under the right conditions, lead to vacuum levels that rival those of the best pumps.

**Sugarbush Health: Now and in the Future ~ Nancy Patch, Franklin-Grand Isle County Forester.** Join a conversation about the complexities of forest management, and ways to get the most out of the forest for long term sap production, as well as maintaining a healthy ecosystem. Stresses in this century are different than what we faced in the past. Learn ways to work with nature to get the best results

**Forty-Six Years of Marketing Bliss ~ Burr Morse, Morse Farm Maple Sugarworks.** Participants in this class will learn the pros and cons of building a retail maple business from the bottom up. Burr Morse will address a wide range of customers, from individuals both local and traveling, to tour bus visitors, with an eye toward safety, satisfaction and sales maximization. The best way to learn is from someone who has had plenty of “hands on” experience and Burr will share his 46 years of that, even the mistakes!

**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

**Installing a Vacuum Tubing System ~ Dave Butler, Sugarmaker and Installer from Lamoille County (Hyde Park Meeting) and Dan Crocker, Owner of Sidelands Sugarbush, Windham County (Bellows Falls Meeting).** Learn more about collecting sap using modern techniques. In these presentations, two sugarmakers with many years of experience in the woods will share techniques and materials that work for them, as well as techniques that they are not in favor of.

**Cleaning Evaporators ~ Panel Discussion.** What materials work best for cleaning the evaporator? How often should you use them? A panel of sugarmakers will talk about methods they use to clean pans and other components of the boiling system.

**Boiling Techniques and High Sap Concentration ~ Glen Goodrich, Washington County sugarmaker.** Firing technique, sap level, defoamer use, niter control, draw off methods—Glen will discuss these and other important components of evaporation in making a superior product. The presentation will also cover concentration of sap using RO and special boiling techniques necessary for processing high concentrate. **Bellows Falls Only**



Lee Davis of Underhill moving wood chips to feed his evaporator.

**Energy Sources for Boiling Sap ~ Daniel Lalanne, General Manage, CDL USA.** This presentation will look at all the different fuels available today to boil maple sap. Efficiency, availability, benefits, and disadvantages of each one will be some of the topics we will be discussing. **Hyde Park Only**

**Cooking with Maple ~ Colleen Palmer, Owner of Palmer Lane Maple.** Come try some great recipes using maple! We will prepare and eat several healthy treats, including a salad dressing, granola, and cookies, that are easy to make and good for you, too! Feel free to bring your own healthy maple recipes to share. For those with allergies, the demonstration will include coconut, peanuts and tree nuts. **Hyde Park Only**

**Cooking With Maple ~ Betty Ann Lockhart.** Betty Ann, twice voted “Vermont’s Best Maple Cook” at the Vermont Maple Festival, will teach us how to make maple treats that are simple, yet elegant. **Bellows Falls Only.**

## Daily Schedule for Middlebury H.S. Jan. 14

7:30 ~ Registration opens; Free Coffee and Donuts

8:30 – 9:00 ~ Welcome (Auditorium)

9:30 – 10:45 ~ Session I

11:00 – 12:15 ~ Session II

12:15 – 1:30 ~ Lunch & Trade Show

1:30 – 2:45 ~ Session III

3:00 – 4:15 ~ Session IV

Turn in evaluations; have a safe trip home.

**The Beginning Sugarmaker ~ Bill Scott, FFA Instructor Emeritus** leads 2 sessions – from tree to the sugarhouse and from the sugarhouse to the can. Attendees of the second session will also learn about good quality control measures and what's good and bad finished product.

**Not In Our Backyard! ~ Speaker from Worcester, MA area.** Woodland pests are coming closer and closer to Vermont and our sugar maples! Learn what signs to look for, how to manage your woods to reduce exposure, and what to do when you see pests in your woods.

**Sugarhouse Inspections ~ Henry Marckres, Chief, Consumer Protection, VT Agency of Ag.** Selling to major markets or just want to be ready for the next wave of regulations? Explore what you may need to do to make your sugarhouse and operation ready for the next steps.

**Update on Current Maple Research ~ Tim Perkins, Director, UVM Proctor Maple Research Center.** Several studies at the Proctor Center focus on ways to increase sap yields in vacuum tubing systems. This presentation will describe current work examining air (vacuum) and sap transfer in maple tubing.

**Taphole Sanitation: How it Affects Sap Yield ~ Tim Perkins.** Reducing microbial contamination of tapholes results in substantial increases in sap production. This presentation will summarize work done over the past 5 years examining the effects of different strategies for spout and tubing replacement on sap yield, including an economic analysis of the costs and benefits of different types of changes.

**Filtering ~ Leader Evaporator Technician.** Filtering is extremely important throughout the sugaring process. Whether filtering sap or syrup, learn what

you need to do to make the highest quality final product for the customer.

**“The Game of Logging” ~ G.O.L. Staff.** Woods safety is no game – each year 2 sugarmakers are killed in accidents in the woods. These accidents do not need to happen. This session will teach participants how to see and assess the dangers and hazards in the woods.

**High Vacuum Without a Pump ~ Tim Wilmot, UVM Extension.** The sap yield from gravity tubing is typically about half that of a system using a modern vacuum pump; however, there may be a better way to collect sap using gravity. This presentation will show results of a pilot study illustrating new methods and materials which can, under the right conditions, lead to vacuum levels that rival those of the best pumps

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**Spouts and Tapping ~ Glen Goodrich, Cabot Sugarmaker.** Deciding the best time to tap your woods and the type of spouts to use is a challenge. Glen will spend this session discussing his experience with a variety of products and time of tapping.

**Got Visitors? ~ George Cook, UVM Extension.** As sugaring become more of an interest to the general public, we have more visitors in our sugarhouses. While we want to share the sugaring experience, these visitors are often in the way and cause distractions. Learn how to plan for visitors to heighten their experience and yours.

**Woods Management.** This roundtable of sugarmakers and foresters will discuss road making, tree selection and cutting, and planning how to get the best from your woods.

**Land Use/ Current Use ~ County Forester.** Land use planning and forest management plans are important to sugarmakers. Discover how to work with your forester and write the best plan for your operation.

**Marketing Your Products ~ Tim Hescok, Shoreham Sugarmaker.** Tim will speak to techniques, strategies and experiences in successfully selling a wide variety of maple products through the web and a print catalog.

**Modern Vacuum Systems ~ Speaker TBA.** As technology changes, most vacuum systems are not as current as they once were. Presenters will show the most modern technology and best practices of installation and operation of a modern vacuum system.

**R/O Systems ~ Speaker TBA.** The cost/benefits of a reverse osmosis machine are clear, but which one is best for you? Once it's purchased, how do you use it effectively? Learn how to choose, install and care for the equipment.



*Tim Wilmot*

UVM Extension Maple Specialist

## **A Message from Jacques Couture, Chairman-elect of the VMSMA**

After almost two years of work and planning by a committee representing all three Vermont Maple Organizations, a merger vote was approved by VMSMA members at meetings that took place at 6 locations throughout Vermont.. This merger will go into effect on January 1, 2012. The committee unanimously agreed that we should keep the name Vermont Maple Sugar Makers' Association (VMSMA).

What was the driving force that led to this merger? One would be hard pressed to find very many folks in the Vermont Maple Industry that could actually cite what each of the three groups does for our industry. Imagine the confusion that exists in the media when they report about Vermont Maple! Who does what? Who does each group represent? The list of questions goes on....After much discussion which actually began 12 or 13 years ago, it seemed that bringing the three groups under one name would help to alleviate much of the confusion and unify our message.

When VMSMA was founded in 1893 there was only one maple organization that served the functions that are being addressed by the three present groups. Over time it seemed that the functions could be served by splitting up responsibilities. In the early 1950s the Vermont Maple Industry Council (VMIC) was established. Its mission was to provide a forum for industry issues to be studied and solved by parties within our industry, with the help of government or academia. In the early 1980s the Vermont Maple Promotion board, later named the Vermont Maple Foundation (VMF) was formed as a means to separate the Marketing aspect of VT maple from VMSMA.

Now, here we are in 2011 bringing it full circle, back to where we were in 1893!

All of the functions of the present organizations will be retained. The VMIC will now be called the Vermont Maple Industry Committee. VMF will be the Marketing Committee. A new set of by-laws has been approved by the VMSMA membership. We encourage you all to take the time to read them to understand the governance structure.

The newly elected board of directors met on November 16 to begin the transition and to elect officers for the coming year. The new officers are Jacques Couture - Chairman, Arnold Coombs Vice - Chair, Emma Marvin - Secretary, Stephen Tetreault - Treasurer. These officers along with Pam Green constitute the Executive committee. Although we have officer positions for Secretary and Treasurer, Mary Croft will continue to serve in that capacity as an employee of VMSMA. For a copy of the new by-laws and a complete list of directors and delegates, please go to [www.vermontmaple.org](http://www.vermontmaple.org)



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**Information for Vermont Maple Producers:**

**Recycling:** Several Vermont solid waste districts are now accepting maple tubing as part of a recycling program initiated in 2011. Only polyethylene tubing is acceptable; older PVC tubing is not (for identification purposes, a piece of poly floats in water, PVC sinks). Most districts will accept 5/16 tubing with fittings attached. Sugarmakers who wish to participate should call their local solid waste district for further information and to make an appointment to bring in tubing.

**Mercury Cooking Thermometer Exchange:** Using a mercury thermometer poses a risk of contamination by a toxic metal if it breaks. Through a grant from the Lake Champlain Basin Program, free non-mercury digital thermometers are available to Vermont sugarmakers in exchange for their mercury cooking thermometers. Anne Macmillan, VT Agency of Agriculture toxicologist will be on hand at the Vermont Maple Conferences in 2012 to collect mercury thermometers and exchange them. For further information she can be reached at 802-828-3479.

**Vermont discontinues the use of galvanized drums.** As of January 1, 2012, maple syrup in Vermont can no longer be stored in galvanized drums. Other acceptable drums are readily available, such as stainless steel, plastic and one-way epoxy-lined. Producers with questions should contact Henry Marckres, Chief, Consumer Protection, VT Agency of Agriculture, Foods and Markets at 802-828-3458.

**The 2011 Sugar Maple Health Highlights** from the Vermont Department of Forests, Parks and Recreation are now available on-line at [www.vtfpr.org/protection/idfrontpage.cfm](http://www.vtfpr.org/protection/idfrontpage.cfm). To receive a copy by mail or for assistance in identifying maple health problems, contact the Forest Biology Lab at 802-879-5687.