

# Maple Syrup Digest

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# GREETINGS FROM YOUR PRESIDENT



Hello to all North American Maple Syrup Council (NAMSC) and International Maple Syrup Institute (IMSI) members.

It will be a distinct pleasure to see you all in Connecticut this October. I am sure we will work together to ensure our industry continues down the path to improved quality.

I hope you had a great summer, with all the sun we had and hardly any rain.

Our trees certainly felt the effects of this lack of water. Mother Nature seems to have forgotten us, but did we consider her?

Come October, we will be discussing some important topics.

I hope that all members present will share their points of view to promote the kind of constructive dialogue that will help move our industry forward.

Looking forward to seeing you again.

---

Bonjour à vous tous membres du Conseil nord américain du sirop d'érable (NAMSC) ainsi que l'Institut International du sirop d'érable (IMSI)

C'est avec plaisir que je vous retrouverai tous en octobre prochain au Connecticut. Je suis certaine que nous travaillerons tous ensemble afin que notre industrie continue de s'améliorer en qualité.

J'espère que vous avez eu du bon temps cet été. Le soleil était au rendez-vous mais la pluie nous a manqué.

Nos érablières ont certainement souffert de ce manque d'eau. Dame nature semble nous oublier mais avons-nous pensé à elle?

En octobre prochain, nous aurons à discuter de sujets très importants.

J'espère que chacun des membres présents nous feront part de leur point de vue afin que nous ayons des échanges constructifs qui favoriseront l'avancement de l'acériculture.

Au plaisir de vous rencontrer.

Cécile B. Pichette  
Présidente  
NAMSC

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# IMSI NEWS

*By: Dave Chapeskie, R.P.F.,  
Executive Director, IMSI*

## **INTRODUCTION**

The International Maple Syrup Institute held their quarterly Board of Directors meeting at the Agricultural Research Centre in St. Hyacinthe, Quebec on Thursday August 9th, 2012. The meeting was well attended by IMSI Directors, IMSI members and guests.

## **TESTING AND ADULTERATION OF MAPLE SYRUP**

The IMSI continues to offer assistance to the IMSI members with adulteration testing of suspected syrups in the North American and international market place. The IMSI is currently completing a more detailed assessment of the different laboratory facilities, including specific sugars assessed, rigour of testing protocols and quality criteria utilized by the different laboratories. Dave Chapeskie will present the findings of this assessment to the IMSI's Board of Directors when it has been completed.

The IMSI members should contact Dave Chapeskie if they have syrup samples they wish to submit for adulteration testing under the IMSI sponsored program. Dave can also provide interested parties with laboratory contact information for Canadian and US test facilities, if they wish to finance and submit syrup samples on their own directly to a lab for adulteration testing.

## **STANDARDIZED MAPLE GRADES AND NOMENCLATURE INITIATIVE**

In general while support for the

changes remains strong, progress in incorporating the changes into maple regulations has been relatively slow since the formal request was submitted to government agencies in September of 2011. A Motion in the Canadian Senate to support the IMSI's Standardized Grades and Nomenclature Proposal was passed unanimously and the Canadian Food Inspection Agency is working through the process, which should lead to the amendment of Canadian Maple Regulations incorporating the proposed changes. The USDA has completed a draft of the new regulations, which has been reviewed by representatives of the IMSI and is similarly engaged in their process. New York State has begun drafting the Regulatory amendments, Ohio State is awaiting the USDA Regulations and Vermont, Maine and New Hampshire have been involved in dealing with initial process requirements but remain committed to the grade and nomenclature amendments.

While the IMSI's goal for implementation of the new standard is the 2013 maple production, implementation cannot occur until regulatory approvals are finalized and new or modified colour classification equipment is commercially available. Based on progress leading to regulatory amendments to date, it is expected that 2013 implementation of the new grade standard will not be achievable, with 2014 target being more realistic at this stage. In addition, once regulatory approvals are obtained, it is anticipated that governments will allow for a reasonable transition period between existing grading systems and the new international standard to permit producers

and packers to significantly reduce if not eliminate significant label inventories and to ease any operational adjustments required due to the change.

It was mentioned that market trial exposures being conducted in the United States and Canada utilizing the new standard grading and nomenclature system will be completed by September 2012 and findings will be reported at IMSI Annual Meeting in Groton, Connecticut in October.

### **MAPLE NUTRITIONAL AND HEALTH BENEFITS RESOURCES**

The maple nutritional and health benefits resources now include a bilingual rackcard, French and English posters and an information CD. The CD contains a camera-ready copy of the rackcard and poster, a copy of most nutritional and health benefits scientific papers and other related information. The IMSI's purpose in developing and providing these materials is for awareness and education purposes.

Now that development of the information resources has been completed, the IMSI will focus on ensuring that the information is accessible to the IMSI members and others. It is noted that the complete IMSI nutritional and health benefits information developed by the IMSI including the rackcard, poster, IMSI position statement as well as access to scientific documents can now be accessed on the IMSI's website.

### **EXOTIC INSECT PESTS PROJECT UPDATE**

The IMSI has initiated a project

related to exotic insect pests, in particular Asian long horned beetle and emerald ash borer, which have the potential to cause extensive damage in sugar bushes and adjoining forests. The intent is to thoroughly review the issue and develop an industry position statement, which would outline actions required by the industry stakeholders and governments to help contain these pests.

### **ORGANIC CERTIFICATION PROGRAMS FOR MAPLE SYRUP**

The IMSI is currently consolidating information on all organic certification programs for maple syrup, which are active in Canada and the United States. This will include both federal and state/provincial level standards where these may exist.

### **IMSI SPONSORED AWARDS (2012)**

The IMSI continues to sponsor two awards annually, the Golden Maple Leaf Award, which recognizes innovation in the North American and International Maple Syrup Industry, and the Lynn Reynolds Memorial Leadership Award, which recognizes outstanding service and accomplishments of an individual for the North American/International Maple Syrup Industry.

### **IMSI SPONSORED MAPLE GRADING SCHOOL**

Kathy Hopkins reported on the IMSI sponsored maple grading school. Participants in the schools continue to greatly value the educational experience offered.

IMSI members may learn about the Grading School and its offerings by



accessing the University of Maine - Cooperative Extension website with the link provided below.

The 2012 Maple Syrup Grading School will be held October 26 - 27, 2012 at the Windham County Extension Office, CT held in conjunction with the NAMSC/IMSI Annual Meetings. Further details regarding the IMSI sponsored grading school and information regarding future grading school offerings in Canada and the United States can be accessed on the website provided below.

<http://extension.umaine.edu/maple-grading-school/>

### **RENEWAL AND MODERNIZATION OF THE IMSI WEBSITE**

The IMSI has recently renewed their website in an attempt to enhance its utility and effectiveness.

The renewed site proved ready access to information in the following important areas:

- goals, objectives and strategic plan of the IMSI
- membership in the IMSI
- news, events and summaries from quarterly Board of Directors Meeting
- IMSI projects included the standard grades and nomenclature initiative and the maple nutritional and health benefits project

### **2013 IMSI/NAMSC ANNUAL MEETINGS**

The 2013 Annual NAMSC-IMSI Meetings will be held from October 21-24th at Delta, Beauséjour, Moncton, N.B. For further information, contact Yvon Poitras at [yvp@nb.aibn.com](mailto:yvp@nb.aibn.com)



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# Tubing Cleaning - Methods Used in the U.S.

Timothy D. Perkins and Abby K. van den Berg  
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## INTRODUCTION

Two factors have major influences on maple sap yields: vacuum level achieved at the taphole and taphole drying. Vacuum controls sap yield by increasing the pressure differential between the inside of the tree and the inside of the tubing system, resulting in higher sap flows from tapholes than would be found without vacuum (Heiligmann et al. 2006, Chapeskie and Staats 2006, Wilmot et al. 2007). Good vacuum is primarily a matter of proper tubing system design and installation, vacuum pump capability, and the control of leaks.

Taphole drying, the slowdown or cessation of sapflow which is typically observed in the second half of each sap flow season, and the factor often responsible for determining the time at which sap flow ends, is a direct result of microbial contamination (Naghski and Willits 1955). It has long been recognized that microbial contamination is strongly related to yield in sap collection systems (Sheneman et al. 1959). A multi-year study at the UVM Proctor Maple Research



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Center demonstrated that tubing systems show fairly rapid reductions in sap yield as they age as a result of early stoppage of sap flow in the latter part of the season, and that these reductions are primarily due to the level of tubing system contamination (Perkins et al. 2010). Numerous research studies have demonstrated that a wide variety of microbes rapidly colonize maple tubing systems (Lagacé et al. 2004), and that changes made in the tubing system aimed at improving sanitation in the immediate vicinity of tapholes (annually changing spout adapters, new droplines, Check-valve adapters) can significantly increase sap yield (Perkins 2009, Perkins 2010, Childs 2010).

In addition or in place of taphole sanitation practices, many producers employ annual tubing cleaning in an attempt to reduce sap yield losses due to microbial contamination (and to improve sap quality). Effective tubing cleaning consists of two parts. The first is washing or flushing of the system to remove microbes and other particles (dirt, wood chips, etc.). Since washing alone does not kill microbes in the system, the second part of cleaning typically involves the use of chemical agents to sanitize the tubing system. For cleaning to be truly effective, elements of both washing and sanitizing must occur. In some practices these steps are combined into one. In many cases however, only one step is conducted, which probably limits the effectiveness of cleaning.

Several other factors can also limit tubing cleaning efficacy. Biofilms are a major impediment to effectiveness of both flushing and sanitizing tubing, as they are not readily dislodged from tubing, and provide refugia from chemical sanitizers that allow subsequent recolonization and regrowth of microbial biomass. Also, to minimize the effect on sap yield in the subsequent collection season, any recolonization of microbes in the tubing system after cleaning must be low. Microbial kill must therefore either be nearly complete, there must be some residual action to the sanitizing agent, or the conditions in the tubing system must be otherwise incompatible with regrowth.

A wide variety of cleaning techniques are currently used in the maple industry, including rinsing the system with pressurized air and water, or attempts to sanitize with chemical solutions such as peroxide, bleach, or alcohol. However, the effectiveness of these cleaning techniques in reducing microbial populations and increasing annual sap yield is often questionable (Perkins et al. 2010, Lagacé 2011, Childs 2012, Perkins and van den Berg unpublished). In fact, it is possible that many of these practices have limited, or even negative effects on sap yield. Thus by employing these practices, producers could be wasting substantial amounts of money, time, and other resources each year. Since it is thought that the majority of U.S. maple producers do currently employ some method of tubing cleaning, it is imperative that research be conducted to determine which, if any, of these methods are most effective at preventing significant annual reductions in sap yield. This will enable producers to increase their annual revenues by employing a cleaning method with an established ability to improve annual sap yield, and/or by eliminating expenditures on the use of ineffective cleaning practices. The first step in completing this research is to deter-

mine the tubing cleaning practices currently in use by maple producers in the United States.

## METHODS

Two electronic surveys of maple producers were conducted after the 2011 sap flow season using KwikSurvey. Participants were recruited through the online communication boards MapleTrader.com, Sugarbush.info, and MapleChatter.com. The first survey was aimed at gathering a broad array of information on the attributes of tubing systems, and included several questions on tubing cleaning. The second survey focused almost exclusively on cleaning of tubing systems. After the surveys closed, results were exported and tabulated using Microsoft Excel. In some cases when an insufficient number of responses for a specific method were obtained, results were grouped into similar categories (for example, all chemical sanitizers were grouped).

## RESULTS

A total of 81 U.S. producers using vacuum tubing were selected from the first survey for analysis. The number of taps ranged from 1,015 to 70,000 with an average of 4,519 taps. Of these, the majority cleaned their tubing using air/water, either blown in from the bottom of the tubing system or sucked into the drop line (Figure 1). Slightly over one-quarter of producers use the "dry clean" method, in which spouts are pulled with the vacuum pump on, and any residual sap is sucked out of the tubing system. Chemical sanitizer use is relatively low in the U.S., with only 21% of producers employing some type of chemical cleaning agent. Of the producers using chemicals, 67% used a chlo-

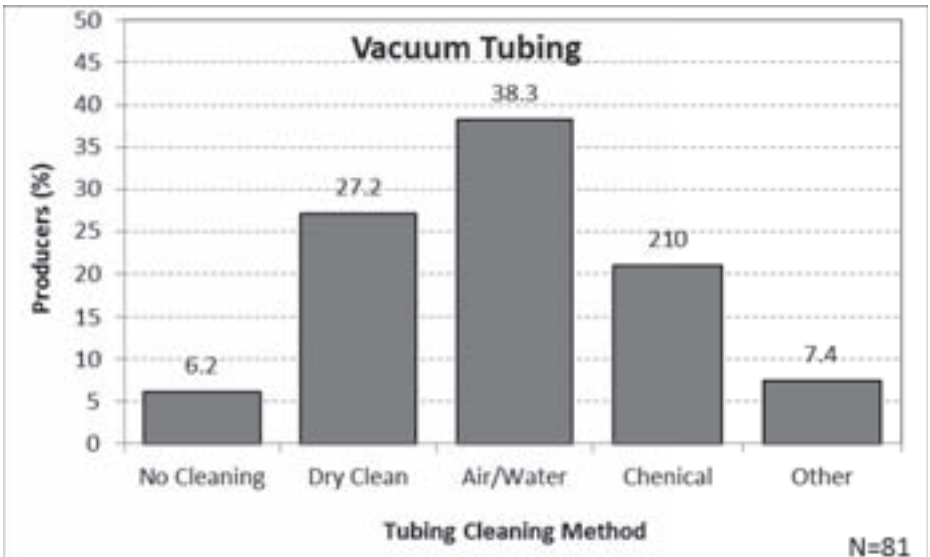


Figure 1. Tubing cleaning methods employed by U.S. maple producers after the 2011 sap flow season. Numbers above bars indicate the actual percentages.

rine-based sanitizer, 20% used hydrogen peroxide, and 13% used alcohol (isopropyl or ethanol). The remaining producers were split between no cleaning and "other" cleaning practices.

In the first survey, producers were also asked to provide their sap yields, which allowed an evaluation of the effect of tubing cleaning (in vacuum systems) on production (Figure 2). Although a variety of producer practices (vacuum level, taphole sanitation, size of operation, etc.) undoubtedly complicates any relationship between yield and cleaning, an analysis of variance revealed no significant effect of tubing cleaning method on sap yield. A well-designed multi-year experiment to explore the primary effect of tubing cleaning on sap yield and quality is sorely needed.

The second survey, focusing primarily on tubing cleaning, had 205 participants from the U.S. who used gravity or vacuum tubing. Of these, 178 were from New England or New York, with the remainder from a variety of maple producing states. The minimum number of taps was 48, the maximum was 70,000, and the average was 3,643 taps.

The general percentages of tubing cleaning methods in the second survey were similar to the results of the first survey. Air/water cleaning was again the most common cleaning method used, followed by "dry clean" (Figure 3). Chemical sanitizers were used by about 20% of respondents. Of those using chemicals, 57.5% used chlorine-based solutions, 15% used hydrogen peroxide, 10% used alcohol (isopropyl or ethanol), 10% used commercial tubing cleaner, and 7.5% used a solution of pan acid. Some producers using chemicals flushed their system with water (38.2%), some let the first sap of the season run on the ground to flush the chemicals from the tubing (54.5%), and some did not flush

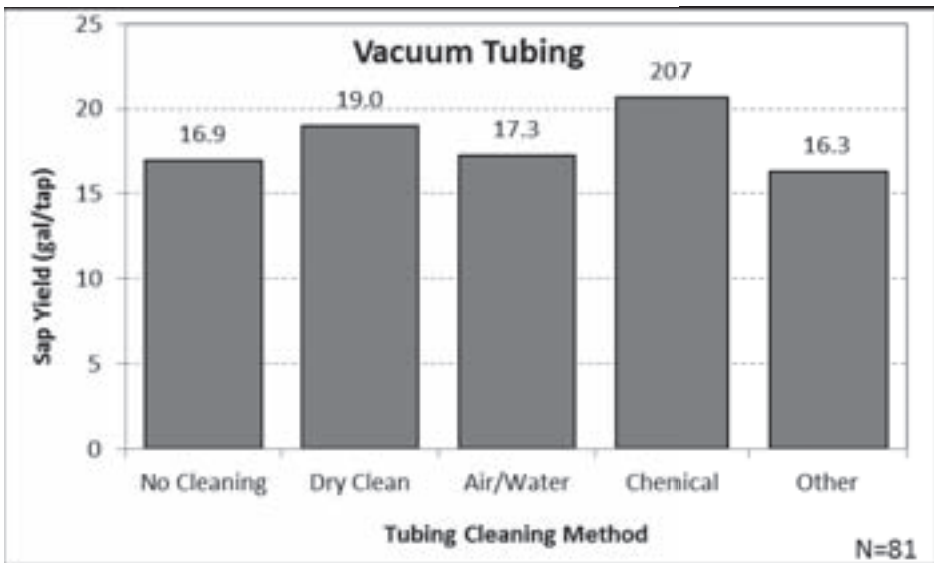
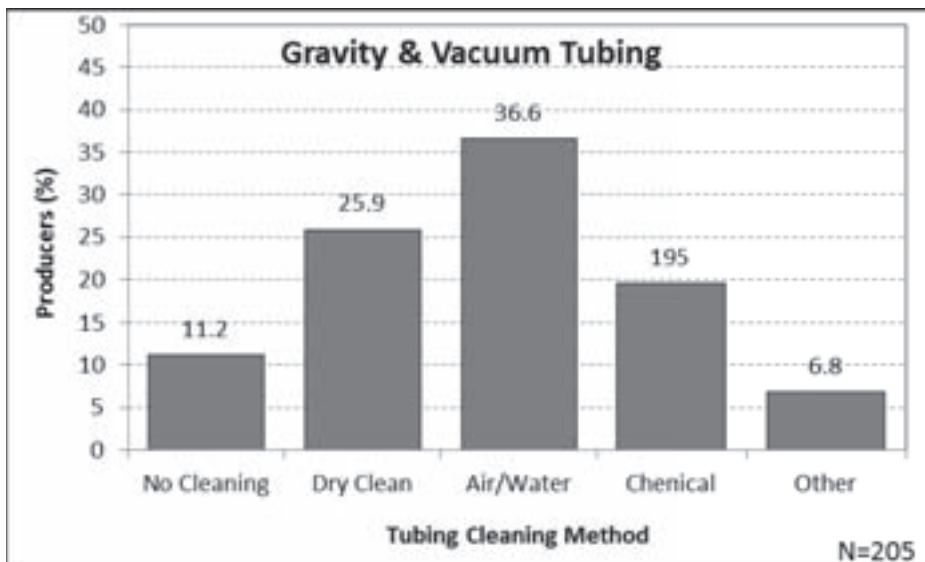


Figure 2. Sap yields by tubing cleaning method. Numbers above bars indicate the average sap yield values. Differences are not significant at  $\alpha = 0.05$ .





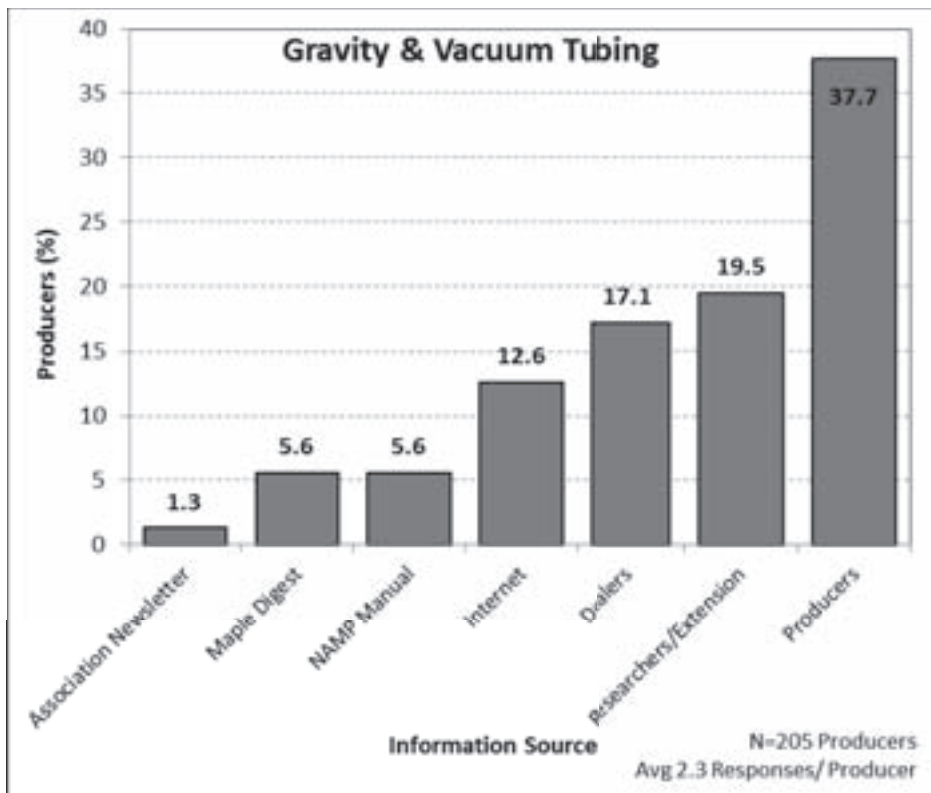
**Figure 3. Tubing cleaning methods employed by U.S. maple producers after the 2011 sap flow season. Numbers above bars indicate the actual percentages.**

(7.3%). Remaining producers either did not clean tubing (11.2%) or used some "other" method (6.8%).

The average number of taps for producers using the "dry clean" method, which averaged 7,337.5 taps, was considerably higher than that of any of other methods, which ranged from a low of 1,176.8 taps for "air/water" to a high of 3,460.0 taps for "don't clean". Producers using chemical methods had an average of 2,955.0 taps. This demonstrates that U.S. producers with larger operations may be interested in employing some method of cleaning, as long as it is not too costly or time consuming.

Producers who clean spend an average of 30 hours on this activity. The average amount of time respondents reported spending on cleaning (including "no cleaning" responses) was approximately 80 taps per hour. The average cost of cleaning materials (excluding any necessary equipment and labor) for those using chemical cleaners was \$0.06 per tap.

We also asked producers how they currently acquired information about how to clean maple tubing (Figure 4). On average, producers were utilizing multiple sources of information to drive their decisions on whether and how to clean, with an average of 2.3 information sources per producer. A high proportion of producers (37.7%) receive information about cleaning tubing from fellow producers. Researchers/Extension Specialists (19.5%), Dealers (17.1%), and the Internet (12.6%) are the next most common sources. Industry publications including the North American Maple Producers Manual (5.6%), Maple Digest (5.6%), and Association Newsletters (1.3%) do not appear to be common sources for information about tubing cleaning.



**Figure 4. Sources of information about tubing cleaning. Producers were allowed to select multiple responses. Numbers above bars indicate the actual percentages.**

## DISCUSSION

The wide variety of tubing cleaning methods employed by maple producers and the wide diversity of information sources would seem to indicate that no one method is obviously highly superior to other methods. The lack of clear differences in sap yield among different tubing cleaning methods in this survey reinforces that notion. Interestingly, although it is well known that tubing systems cleaned with air/water suffer rapid and steady losses in yield over time due to increasing levels of microbial contamination (Perkins et al. 2010), it remains the most commonly used tubing cleaning method. It is likely that the "no clean" and "dry clean" methods are no more effective at cleaning tubing as the "air/water" method. Therefore, according to these surveys, nearly three quarters of U.S. maple producers utilize tubing cleaning methods that are ineffective in terms of maintaining high sap yields.

Chemical sanitizers used to clean tubing often suffer from a variety of problems. Although they must effectively dislodge and kill microorganisms at a reasonable cost, such chemicals must also be safe to transport, store, and handle.

In addition, they must be properly applied and tubing should be rinsed in some fashion to avoid contamination of the sap. Finally, chemical cleaners must have little or no harmful impact on the environment. These conditions are not currently met by all available cleaners. Unfortunately, some chemicals in use by the industry at this time do not appear to have any residual action, so cleaning must be done immediately prior to or during the season.

Isopropyl alcohol is widely used in Quebec to clean tubing (J. Boutin, Club d'encadrement technique acéricole des Appalaches, personal communication). Preliminary studies at the UVM Proctor Maple Research Center have shown little effect of chemical sanitizers, including isopropyl alcohol, used on spouts as a way to maintain good sap yields. A similar lack of sap yield improvement in alcohol-cleaned tubing in recent testing in NY (Childs 2012) and the increases in sap yield resulting from using new spouts when compared to used spouts and tubing cleaned with isopropyl-alcohol in Quebec (Lagacé 2011) further demonstrate that considerably more research will be needed to establish the efficacy of isopropyl-alcohol, or other chemical sanitizers, before they can be recommended for adoption in the U.S. maple industry.

In order for cleaning, either with or without chemical sanitizers, to be recommended, the net benefits of cleaning on sap yield and/or sap quality must outweigh the cost of materials, equipment and labor required to clean. Otherwise cleaning is wasteful both financially (money spent where it results in no net profit) and in terms of time lost that could be more wisely spent on other activities.

In conclusion, these results strongly demonstrate the considerable need for further research and information dissemination within the maple industry on the efficacy of tubing cleaning on sap yields and the effects on sap quality, including an economic analysis, with the goal of finding a cleaning method that works and is cost effective, or to provide solid evidence to support a recommendation to forgo tubing cleaning and take alternative approaches.

## **ACKNOWLEDGEMENTS**

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## WORKING WITH THE MEDIA

*Taken from the Massachusetts  
Sugar Bush News*

Talking to reporters has become a fact of life for most sugarmakers. Our industry plays an important and somewhat iconic role in Massachusetts, and just about every newspaper, radio station, tv station and blogger wants to have some sort of story about sugaring each year.

When your first reaction might be to think of this as a hassle and a distraction from your work, it is also an opportunity for you to promote your business and the industry as a whole. For those of us who sugar, it's easy to forget that most of the general public still has no idea where maple syrup comes from, how it is made, or why it is important to buy from a local source. Talking to the press is a great way to educate people.

Most newspapers in your state are small enough that it is easy to develop a relationship with a reporter who covers your town. Once you and the reporter know each other, they'll call you first when they have questions and when you want to promote your business they'll respond to your calls promptly.

Reporters are always looking for something different or new, so think about ideas that will make them interested in writing about your business. New equipment (particularly things designed to be energy-efficient), new marketing strategies (new jug designs, for example, or value-added products), and anniver-

saries (100th year of sugaring for your family) are all good angles to promote.

Reporters' favorite question seems to be "how do you think the season will be? They'll ask this any time of year, no matter how far off the season is. While we all like to respond by saying "Ask me in May," that doesn't come across well. Be patient and explain that sugaring, like any other farming, is dependent upon so many variables, particularly the weather, and we can't predict how the season will be.

At the end of the season, when reporters ask "how was the season?" it's best to lead with something positive. Tell them that you made excellent tasting syrup and have lost of bottles of all grades on hand ready to sell. Let them know that the new energy-saving equipment that you installed saved you lots of money and made production much more efficient. Don't hide the truth from them - do let them know how your production levels were in comparison with recent years - but remember that if the public reads that it was a lousy season they may well decide not to other seeking out your products, thinking you won't have any to sell.

And remember that your season may not be a reflection of how everyone in the industry is doing. If you're done boiling for the year, say so, but don't just say "the season's over," because some producers in other parts of the state may still be boiling. If the reporter is doing a general piece about the sugaring season, encourage them to talk to other sugarmakers as well.

In general, keep answers brief and specific, and try to avoid using jargon or technical language - the article is meant for the general public, not other sugarmakers. And humor often doesn't come across well in print, so hold off on the jokes.

If reporters ask questions about the industry as a whole, or ask anything you don't have an answer for, refer them to your state's website or phone number for answers.

For more ideas, "Working with the Media: Public Relations & Publicity," is an excellent publication from CISA, is available online at [http://buylocalfood.org/upload/resource/Working\\_With\\_The\\_Media%284-3%29.pdf](http://buylocalfood.org/upload/resource/Working_With_The_Media%284-3%29.pdf)

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# **PENNSYLVANIA, OHIO AND NEW YORK MAPLE PRODUCERS BRING SOMETHING SWEET TO THE SHORES OF LAKE ERIE**

*By: Les Ober  
Geauga County OSU Extension*

If you were to ask maple syrup producers what they like to do in the off season, one of the answers would have to be going to maple meetings and tradeshows. The world of maple syrup production is evolving quickly with new products and innovations are coming out every year. The biggest problem facing the planners of those meetings is the narrow window of time in which most maple meetings are held. Traditionally, January is the time for the majority of the meetings. With every maple producing state from Wisconsin to Connecticut competing for a time slot, there is almost no time for any new meetings to be added to the schedule. An even more daunting task is finding speakers that are available to present at these events. The producers from Northwestern Pennsylvania, Ohio and Southwestern New York may have come up with a solution to this meeting/tradeshow dilemma with the launch of the Lake Erie Maple Expo (LEME) in November.

The LEME will be held in Albion, Pennsylvania on Friday and Saturday November 9, & 10, 2012 at the Northwestern High School. Albion is about 15 miles South of Erie on St

Rt. 18 and 6N. The format of the LEME is traditional, using a format similar to the New York State Maple Conference in Verona, New York. What's new is the time of year that the LEME is being held. When asked about holding the meeting in November, Expo Chairman and NW Pennsylvania Maple Syrup Assn. member, Daryl Sheets' responded with, "Why not? The Northwest PA Assn. has been considering moving their annual meeting to a fall time slot for several years. The attendance at their meeting has been going up annually but it was getting harder and harder to get speakers and to avoid conflicts with meetings in neighboring states". "Late Fall is a great time to hold a meeting", Daryl explained. "It is after the fall tourist season and before the winter snow season. It comes at a time when producers are still working on modifications to their operations. For dealers and manufacturers it comes at a time of the year when it is still possible to sell equipment and get it out the door before the new season arrives".

So what can producers expect when they arrive at the LEME? The LEME will kick off Friday evening with a 4 hour tradeshow from 5:00 to 9:00 pm. Rounding out the program on Friday evening will be a Maple Rap Session where producers will have a chance to ask questions and get answers from a panel of experts. On Saturday, the program will run from 8:00 am to 4:00 pm with a break for lunch which is included in the registration fee. There will be breakout sessions that will cover a variety of topics. Presenting the topics will be speakers from the Maple Industry,

University of Vermont, Penn State University, Cornell University and The Ohio State University. There will also be producers from Pennsylvania, New York and Ohio presenting and working behind the scenes to make the expo a success.

The facility at Northwestern High School has over 5,000 sq. ft. available for the tradeshow with additional rooms if needed. There is a 600 seat auditorium and multiple classrooms available for speakers. Most are equipped with modern audio visual equipment. The LEME Committee has enlisted the help of the Albion FFA Chapter to help put on the Expo.

All of the registration information will be listed on the NW Pennsylvania

Maple Syrup Assn. website, [www.pamaple.org](http://www.pamaple.org). There will be a complete list of speakers, topics and times released by September 1st. Registration deadline is set for October 15, 2012 and preregistration is required. If you want to make a weekend out of your visit, the Erie PA area is one of Pennsylvania premier vacation areas with something for all members of the family. In addition, fall is a wonderful time to visit NE Ohio and Western NY home of some of the best wineries and most interesting natural and historical sites in the nation. Mark your calendar for the 2nd weekend in November and plan a trip to NW PA. to talk Maple.



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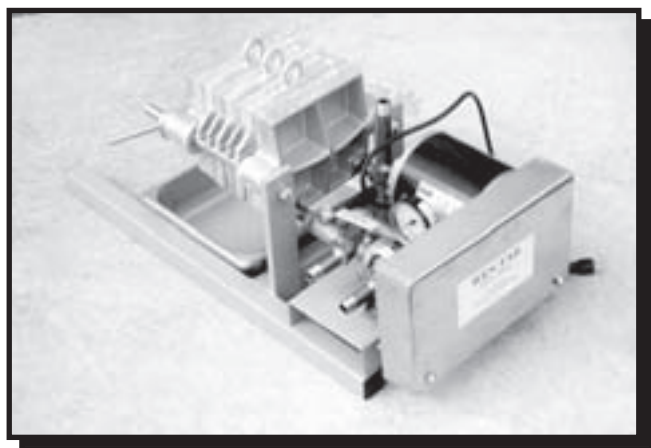
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### **LAKE ERIE MAPLE EXPO (LEME)**

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For more information contact:

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## **NAMSC / IMSI**

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**2019 • Minnesota**

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# IN MEMORIAM

## MARION E. PAUL

Marion E. Paul of Lanark County Ontario, Canada passed after a short illness in Perth, Ontario on Wednesday, June 6, 2012 at the age of 77. Marion and her husband Brien were charter members of the Ontario Maple Syrup Producers Association which was formed in 1966.

Together they farmed the Paul homestead with maple being the major crop. During the early 60's a new sugar camp was built and Paul Maple Products was formed. Marion saw the potential of more income by making maple syrup into sugar & butter ultimately increasing their income greatly. From that time she made many thousands of lbs. of maple sugar and was marketing it all over, including Expo 67 in Montreal. Marion also ran the OMSPA booth at the Royal Winter Fair in Toronto making sugar and promoting maple for many years.

The Paul's were relentless supporters of the maple industry. In fact Marion held many offices with OMSPA and Lanark County Maple Producers. She also worked on the committee for the devastating ice storm in 1998, assisting producers by getting help to clean up the various maple bushes and restoring services in the area. Marion was eager to work on organizing summer tours, maple workshops as well as three North American Council meetings held in Ontario. She was also a maple judge for competitions around Ontario. Marion also managed the equipment sales for Paul Maple Products.

Marion Paul was inducted into the Maple Hall of Fame in Croghan, New York in 2001 making her the only female producer to be so honoured. Her contributions in her local community were overwhelming, serving on hall & fair boards etc.

She leaves behind her husband Brien of 59 years a daughter Kathy, son Wayne, son Darrel and 11 grandchildren.

Marion will be greatly missed by her family and many friends.



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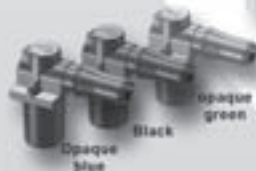


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