

ONTARIO MAPLE MAINLINE



Maple Dateline

Mainline Deadlines

Winter - November 15

Spring - February 15

Summer - May 15

Board Meetings - 2020

October 5, December 7

May be in person or by

Zoom

PRESIDENT'S MESSAGE

Another summer is flying by with many projects still to complete around the sugarhouse before fall comes, and the bush work needs to be started.

Water levels in the Great Lakes are at record levels and the bush has been extremely lush and healthy in this region. However, most are aware that regions of Eastern Ontario have been experiencing Gypsy Moth issues. There will be a webinar on the Gypsy Moth issues later this fall. Please see more details on the website for times.

Due to COVID19, this year's Summer Tour was postponed until 2021 and it will still be hosted by Lanark and District Local. I am hopeful of attending next year as we return to a new normal environment. With most of the province in Phase 3, we are starting to see more people travelling; Ontarians are experiencing Ontario versus travelling out of the province. We have a great province, with a great maple industry that we

should all be proud to promote.

Although we weren't able to get together at the Summer Tour, OMPSA was able to hold its AGM via Zoom. Congratulations go out to Frank Heerkens (President), Steve Needham (1st Vice) and Jules Rochon (2nd Vice) on their election. We are in good hands with this group as they assume leadership effective January 1st 2021.

OMPSA wasn't successful with its ecommerce application but many individual producers have been. This is a great opportunity for members to expand into ecommerce and increase their profile on line. OMPSA held an ecommerce webinar in August and is planning another this fall; please check the website as more details develop.

This summer the Ontario government removed the Agricultural Exemption as it relates to Boilers and Pressure Vessels with new rules effective July 2021.

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OMPSA will be involved with the TSSA by providing input for the guidelines as they relate to maple. We were given assurances that for the province there will be a dedicated maple staff to assist with the transition.

Thanks go to fellow producers and dealers who support the OMSPA jug program. The financial compensation OMSPA receives from the jug suppliers helps support OMSPA and market the Sweet Ontario brand.

Please enjoy the fall and work safe.



Brian Bainborough

ONLINE PAYMENTS WEBINAR

Thursday, September 10th - 8 pm

Learn about the major e-commerce payment methods and how to implement them on your website

Email the OMSPA office at
admin@ontariomaple.com to register.

EXECUTIVE DIRECTOR'S REPORT

The summer has been busy for the OMSPA office and I don't expect it to change this fall. Many of our activities, like the AGM, have continued but in a different way. Each task has to be executed, not in our regular fashion, but with a COVID twist to it. For example, our AGM was carried out on ZOOM. These changes have brought some advantages. Members from across the province could attend with no travel time or other costs.

Recent work items include:

- Coordinating the OMSPA maple production survey and creating a new online form for submissions. See the results on page 12.
- New memberships and renewing the last few memberships for 2020.
- 2019 Year end bookkeeping and financials.
- Coordinating the ZOOM AGM and several board meetings on the same platforms.
- Website updates to omspa.ca and ontariomaple.com.

Current items include:

- Working with the board, Amy Hogue and our funder (Southern Ontario Fed. Dev.) on the CEF project to finish it in a way that promotes Ontario Maple, Maple Weekend and works in this new COVID changed environment.
- Work on webinars to support our members in this time and help provide replacement of the information provided at fall meetings and workshops.

I wish good fall weather for you as you prepare for the coming season.

John Williams

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HAVE A GOOD SEASON !

MARKETING & PROMOTIONS COMMITTEE REPORT

I would like to start my report by dedicating it to the late Ron Shaw. Ron recently passed away and was one of the founding members of OMSPA in 1966. I recall doing a cover story on OMSPA's Fiftieth Anniversary, during which I had the opportunity to learn how our organization began. I enjoyed several conversations with Ron on this topic.

The M&P group is working on hosting a series of webinars featuring topics to assist members with their ecommerce businesses. I am hearing great news of outstanding results from producers that have websites and are taking ecommerce orders, doing porch pick up or local deliveries. Our next Webinar is on September 10th at 8pm. The focus is on the four main types of payments systems in ecommerce. We will discuss how to get started, and how to set up these systems.

Progress has been made on two styles of OMSPA promotional shirts: a less expensive T-shirt for use at events or shows, and a dressier Polo shirt style. We are looking for orders to help kick start this program. See below.

The Royal Winter Fair is going ahead with the

agricultural food competitions, including maple. OMSPA has sponsored our usual trophies. Be sure to get your registration done by September 10th. Entries are to arrive at the Royal in late September. Note that there is a new shipping address this year.

M&P along with Eastern local are currently exploring a new French version of our cook book. It is now in the translation stage. We will keep you posted. We have secured a great number of pre-orders. This will help fund and promote the French version of the cook book.

There were funds budgeted for a new display tent, tear drop flags, and table clothes. With COVID, things have changed. I have to wonder when we will see large events again. If a local wishes to purchase one please contact John or me.

In closing, I want to remind producers not to sell cheaply. We work hard to produce the best quality syrup we can offer, and it demands a top price. People will pay for quality. That's what makes OMSPA producers leaders in the industry.

Steve Needham M&P Chair

ORDER OMSPA T-SHIRTS AND POLO SHIRTS!

Finally, our own shirts again! Two designs have been agreed on:

- A short sleeved 100% cotton t-shirt, red with a black Sweet Ontario logo on the front and a black OMSPA logo up high on the back. Logos will be screened on. \$20 each for S to XL. \$22 for 2XL and up. Men's and Women's available
- A short sleeved polo shirt, burgundy with a white embroidered Sweet Ontario on the left chest and a white embroidered OMSPA logo on the back up high. \$46 each for S to XL and \$48 for 2XL and up. Men's and Women's are available along with long sleeve for a \$2 up charge.

Visit the blog in the members section of www.omspa.ca for more some pictures and infor-

mation on ordering.

The OMSPA Store will be placing orders for these shirts after September 27th.



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Invasive species and the maple syrup industry: We need your help!

By: Kristin Pallionis, Invasive Species Centre

Canada is the leading global producer of maple syrup products, accounting for approximately 71% of the world's maple syrup. In 2018, maple syrup exports reached \$406 million (CAD), an increase of \$24 million (CAD) from the previous year (Natural Resources Canada, 2020). This shows the growth of Canada's maple syrup industry along with its importance to the Canadian economy. In addition, eastern Canada's estimated 2.4 billion maple trees (*Acer* spp.) provide an annual economic benefit of \$646 million (CAD) related to run-off control and carbon storage (Pedlar et al., 2019). Maple trees are one part of the ecosystem; other living organisms and non-living factors also contribute to the health of Ontario forests. Imbalance in any one or combination of these factors can impact the health and vitality of Ontario forests and invasive species are a common contributor to a disrupted system.

Many invasive species have direct and indirect impacts on maple syrup production in Canada. The Invasive Species Centre (ISC) is a non-for-profit organization that prevents the introduction and spread of these invasive species in Canada by connecting stakeholders with knowledge and technology. Through species profiles, monthly webinars, best management practices, management services, fact sheets, and newsletters like this one, we create a hub for collaboration and knowledge sharing to protect Canada's natural environment.

Three species relevant to the maple syrup industry are Asian longhorned beetle (ALB; *Anoplophora glabripennis*), spotted lanternfly (SLF; *Lycorma delicatula*), and European gypsy moth (EGM; *Lymantria dispar dispar*). Only one of these species, EGM, has established populations in Canada - but we can't ignore the other two! In fact, the best and most cost-effective solution for managing both ALB and SLF is to prevent them from coming here in the first place. Investing in prevention for any invasive species not only reduces costs, but protects against economic loss, environmental



Figure 1. Invasive species like Asian longhorned beetle pose a threat to the maple syrup industry.

repercussions, and, especially where maple syrup is concerned, our cultural identity. As maple syrup producers, you can contribute to invasive species management by acting as early detectors for these harmful species.

Asian longhorned beetle

Have you heard of the Asian longhorned beetle and the threat it poses to hardwood forests in North America? ALB is a highly destructive wood-boring pest that targets maples and other hardwood trees, including poplar (*Populus* spp.), birch (*Betula* spp.), willow (*Salix* spp.), and elm



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Figure 2. Asian Longhorned beetles have white spots and long, segmented, black and white antennae.

(*Ulmus* spp.; Pedlar et al., 2019). Female adults chew into the bark or branches of host trees to deposit eggs. Once hatched, the larvae tunnel into the heartwood of the tree, hindering its ability to transport water and nutrients. Over time the tree will die. Adults emerge in the spring by chewing their way out and leaving large, round exit holes (6-14 mm in diameter; Natural Resources Canada, 2020). **Don't confuse these with spile/tap holes!** Sugar maple tap holes differ from exit holes by the presence of grooves and ridges left by the drill bit (Ric et al., 2006). Additionally, ALB exit holes are



Figure 3. ALB exit holes. (Photo: Dennis Haugen, USDA Forest Service, Bugwood.org)

found across the tree with old tap holes only being present in the lower 2 m of the trunk.

Fortunately, ALB is not established here in Canada – but it has been detected twice in Southern Ontario. It was first detected in Toronto in 2003

and was declared eradicated in 2013. However, another population was identified in the neighbouring City of Mississauga in late 2013 (Pedlar et al., 2019). After five years of extensive surveys, on June 9, 2020 the Canadian Food Inspection Agency (CFIA) also declared ALB eradicated from the City of Mississauga (Government of Canada, 2020).

If ALB were to establish and spread through Canada, it could result in the loss or decline of **maples, significantly impacting Canada's** multimillion-dollar maple syrup industry, among others. **Maple trees aren't the only species under threat – all hardwoods are at risk from ALB!** **Canada's forestry industry could lose billions of dollars in wood products.** The loss of hardwoods would also have negative impacts on Indigenous communities, recreational activities, and the tourism industry (Natural Resources Canada, 2020).

Spotted lanternfly



Figure 4. The spotted lantern fly has black spots on its forewings and bright red hindwings underneath.

Have you spotted the spotted lantern fly? Hopefully not! SLF has not been detected in Canada but has been intercepted just across the border in the United States. Its first establishment in North America was in September 2014 in Berks County, Pennsylvania. Since 2014, SLF has established populations in four neighbouring states (New Jersey, Delaware, Maryland, Virginia) and has been detected (no infestations) in New York, Massachusetts, Connecticut, and North Carolina (Cornell University, n.d.).



Figure 5. SLF secrete “honeydew” which causes sooty mould to grow at the base of trees.

It’s no secret that SLF is hard to contain. This very showy insect lays eggs on almost all hard surfaces, including vehicles, outdoor equipment, and patio furniture, and thereby easily spread by humans through transportation and movement of goods. The preferred host is tree of heaven (*Ailanthus altissima*; Cornell University, n.d.), but SLF feed on over 70 species of trees and plants, including cultivated grapes, fruit trees, and hardwoods.

Consequently, it poses a serious threat to Ontario’s multibillion-dollar wine, fruit, and forestry industries. SLF feed in swarms on plant sugars, which disrupts sugar circulation and damages trees, grapevines, and tender fruit. Damage to trees by SLF feeding includes oozing sap, wilting, leaf curling, and tree dieback (Pennsylvania Department of Agriculture, n.d.). In addition, SLF excrete a sugary substance known as “honeydew”, which rains from the canopy in high populations and will accumulate on or at the base of plants fostering the growth of black sooty mould.

In Pennsylvania, SLF is already threatening its agricultural and forestry industries. A recent study estimates that this pest could cost the Pennsylvania economy \$324 million (USD) annually, including annual economic impacts of up to \$42.6 million (USD) to the agriculture industry (with nursery and fruit growers taking the brunt of the impact) and \$152.6 million (USD) to the forestry industry (Duke, 2020). The economic impact to sugar maples in Pennsylvania is estimated to be \$1.1 million (USD; Harper et al., 2019). The cost in Ontario could be much higher with our greater prevalence of maple trees and their economic importance in comparison to Pennsylvania. Research is ongoing to determine long-term impacts of SLF on host trees, and potential impacts to maple syrup production are still uncertain. Don’t be fooled by its bright, beautiful red hind wings! SLF is a nuisance pest that disrupts people’s quality of life and ability to enjoy the outdoors during spring and summer. SLF should be considered a serious threat to the Canadian economy, maple syrup production, natural ecosystems, and outdoor recreational activities.

European gypsy moth

Last, but not least; as an Ontario resident, you may have already heard about European gypsy moth this summer. This invasive pest has caused havoc in many communities across Ontario, by defoliating trees and disrupting our ability to enjoy



Continued on page 10

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the outdoors. Large numbers of EGM have invaded our trees, houses, patios, and much more. EGM was first detected in Ontario in 1969. In about 12 years, widespread defoliation was observed across southern Ontario communities (Ministry of Natural Resources and Forestry, 2014). This insect can also be found in Quebec, New Brunswick, Prince Edward Island, and Nova Scotia.



Figure 6. Gypsy moth caterpillars are 5 - 6 cm long and have blue and red dots along their backs. Photo echoe69, Flickr

Defoliation begins in the spring when larvae (caterpillars) climb up the tree to feed on the new crown foliage. Larvae can chew holes in leaves or devour them whole, often defoliating the whole tree. Over several years, increased stress from EGM can lead to tree death – especially for trees and shrubs located in urban or drought-stricken areas. For trees that survive, a weakened defense system from EGM damage can increase susceptibility to other invasive pests and pathogens.

What's at risk? EGM has more than 300 known hosts, with preference for hardwoods like the sugar maple (*Acer saccharum*) and oaks (*Quercus* spp.) as well as softwoods such as Eastern white pine (*Pinus strobus*) and Colorado blue spruce (*Picea pungens*). Gypsy moth infestations directly impact maple trees: defoliated maples “reflush” their leaves during the summer, which requires the use of root sugar storage. Some producers have observed lower sugar content following EGM outbreaks that reduce syrup output in the following year!

What you can do

How can you protect your maple trees from these, and other, pests? There are three easy steps you can follow to prevent these species from spreading. The first step is “Don’t Move Firewood”! Moving firewood or other untreated raw wood products can, and does, spread insects and diseases much farther than they can travel on their own. Instead, source and burn wood locally! The second step is to regularly monitor the health of your trees and check your trees for evidence of invasive pests including ALB, SLF, and EGM. You can achieve this by becoming familiar with the different life stages of each pest. Finally, if you see one of these species or signs of infestation, report your sighting to www.EDDMapS.org/Ontario or 1-800-563-7711.

Thanks for your help in protecting Ontario’s biodiversity!

Visit www.invasivespeciescentre.ca or call us at 1-705-541-5790 to discuss your invasive species management challenges, learn more about invasive species threatening Canada’s natural spaces and sign up for upcoming invasive species events, news, tools, and resources available to help you keep your woodlot invasive-free!



Figure 7. Don’t move firewood! It can spread invasive species much farther than they can travel on their own.

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In memorial

The Ontario maple industry has lost several leaders over the summer.

Ron Shaw

Ron passed away in Orillia after a lengthy illness on July 22. He was a past President of OMSPA, and a past Chairman of the North American Maple Syrup Council. He served as Ontario's representative on the council for many years. As a producer, Ron was an early adopter of many new technologies. Our sympathies to the Shaw family who are still leaders in our industry today.

Peter Wensink

Peter passed away suddenly on July 5th. He followed many passions in his life, but many OMSPA members in Eastern Ontario will know him for his forestry consulting company, LORAX. Our condolences to his family and the many friends he left behind. For a moving obituary by his friend Jim Hendry, visit the blog in the members area of omspa.ca.

Sarah Martz

Sarah succumbed to cancer on August 10th at the age of 32. She replaced our good friend Paul Bailey when he retired from the Food Safety Branch of OMAFRA. Unfortunately, only the members of three locals had met Sarah. Todd Leuty stated, "she really enjoyed the maple industry, the producers she met and was learning fast."

This note from Renee Bowler, Director of the OMAFRA Food Safety Inspection Delivery Branch: "Sarah was highly regarded by her peers within OMAFRA and by regulated clients and stakeholders in the horticulture industry. Sarah was also enrolled in part-time studies at the University of Guelph, where she was a Ph.D. candidate in the Department of Population Medicine. Sarah should have had so much more ahead of her in life, and will be dearly missed. Thoughts and prayers go to Sarah's family and friends."

For more details visit legacy.com.



2020 Ontario Maple Syrup Production Survey Results

Results from 87 producers in Ontario, representing 239,026 taps and a production of 1.28 L/tap.

2020 Production Results

	Average	Range
# of Taps	3,187	23 – 34,000
Production	4,142 L	
Syrup Yield		
2020	1.10 L/tap	0.28 – 3.03 L/tap
Lowest (past 5 years)	0.78 L/tap	0.25 – 2.02 L/tap
Highest (past 5 years)	1.26 L/tap	0.4 – 2.55 L/tap
Sap Sweetness		
Early Season (57)	2.6%	1.5 – 4.0%
Mid-Season (53)	2.4%	1.5 – 3.3%
Late Season (52)	2.0%	1.0 – 3.3%

Collection Method	% of Total Taps
Buckets	4.1%
Tubing with No Vacuum	2.7%
Tubing with Vacuum	93.2%
Vacuum: Average 22.6 inches Hg (range 13 - 28)	

Spouts	% of Total Taps
Conventional (7/16")	2.7%
Health (5/16", 1/4" or 3/16")	97.3%
Check Valve	8.4%
Seasonal Disposable	35.2%

Heat Source for Evaporation (76) (3 producers use 2 sources)		
Solid Wood 78%	Oil 17%	Steam 5%
Propane 1%	Electricity 1%	Wood Pellets 1%

Heat for Finishing (if separate unit) (63) (4 producers use 2 sources)			
Propane 70%	Solid Wood 24%	Electricity 5%	
Steam 3%	Wood Pellets 2%	Oil 2%	Other 2%

Annual Maple Syrup Production in Ontario (Litres)

2020 Estimated from Survey				
2016	2017	2018	2019	2020
1,809,345	1,932,088	2,113,932	2,282,137	2,196,771

Survey represents 14.0% of Ontario taps (Stats Canada, 2016)
Source for 2016 to 2019 production: Statistics Canada, CANSIM

Note: Numbers in brackets (#) represent the number of responses available from the surveys.

2020 Packaging and Prices

Method of Sales	Average	% of Total Sales
Retail	70.1%	32.7%
Wholesale	20.3%	24.6%
Bulk	18.0%	42.7%

Packaging	% of Retail Syrup Sold (73)	% of Wholesale Syrup Sold (43)
Metal	9.9%	12.0%
Plastic	52.6%	53.4%
Glass	37.5%	34.6%

Size of Container	Average Retail Price	Average Wholesale Price	Average Wholesale Discount
4 L	\$66.84	\$54.90	14.3%
2 L	\$37.57	\$30.21	16.4%
1 L	\$21.81	\$16.69	23.0%
500 mL	\$12.83	\$10.34	19.4%
250 mL	\$8.37	\$6.68	18.4%

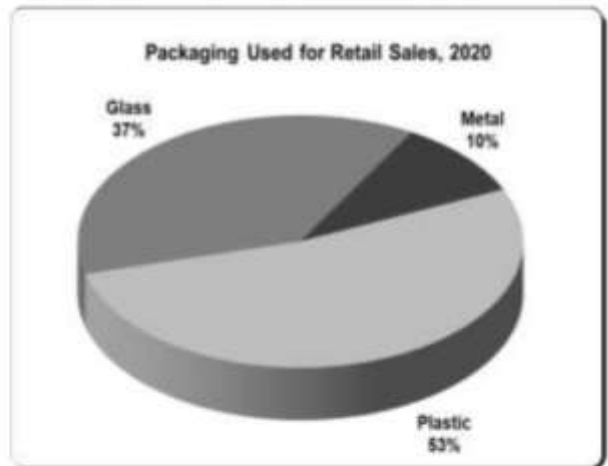
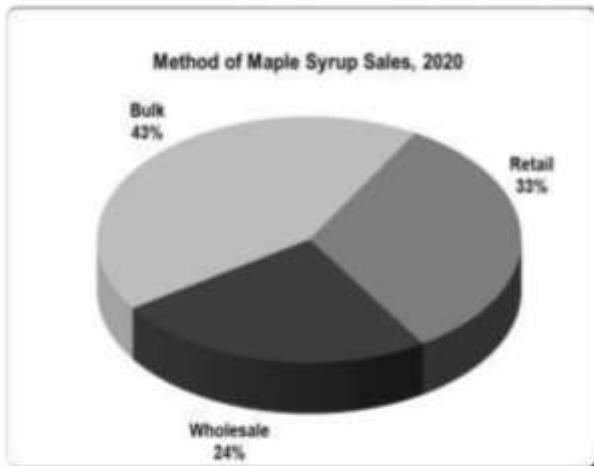
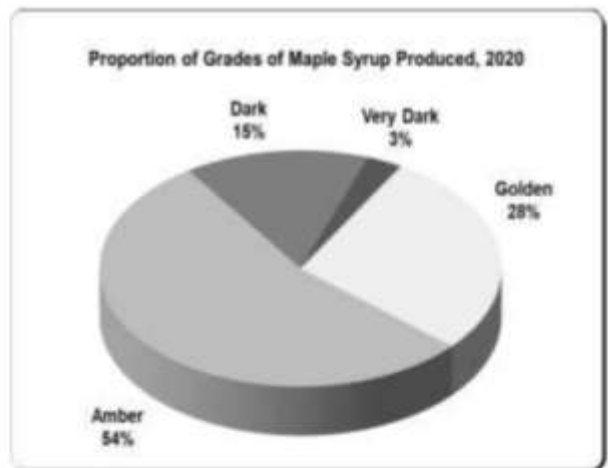
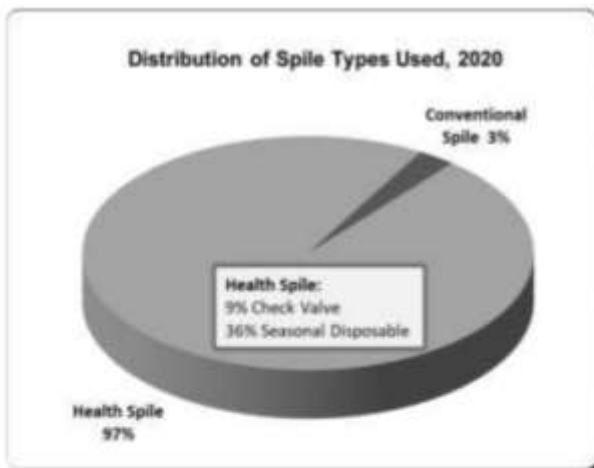
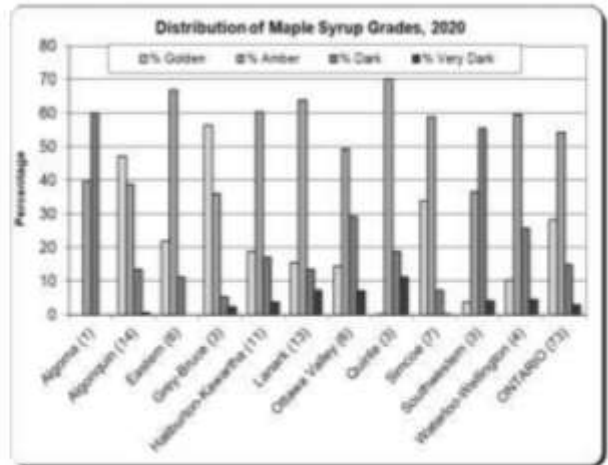
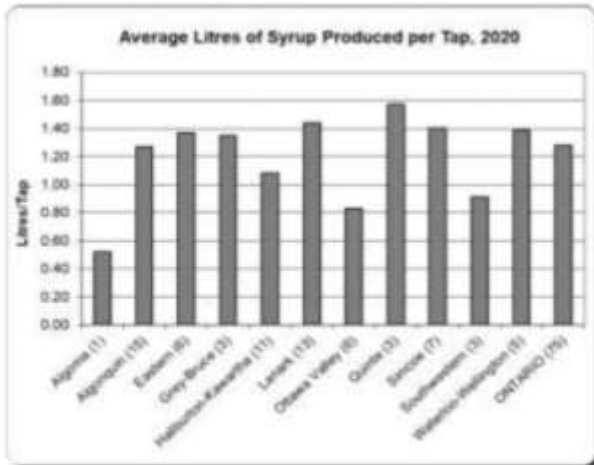
Grade of Syrup	Average Bulk Syrup Price/lb
Golden (11)	\$2.78
Amber (18)	\$2.74
Dark (13)	\$2.68
Very Dark (2)	\$2.58

2020 Additional Information

Use Reverse Osmosis:	57.9%
Are Certified Organic:	4.1%
Make use of OMAFRA Maple Blog:	54.8%
Made Improvements this Year:	68.4%
(Average Investment: \$14,489 Median: \$3,000 Total \$738,920)	
Sell Raw Sap:	4% of producers sold a total of 6,090 L of sap
Tap Rental:	36% of the taps represented by the survey are rented at an average price of \$1.17/tap (range: \$0 - \$2.00/tap)
Change in number of taps:	Over next 5 years, 55% plan to maintain number of taps, 44% to increase and 1% to decrease

OMSPA Local	First Day of Boiling	Last Day of Boiling	Average Sap Sweetness	Litres of Syrup/Tap	Average Number Taps	Average 4L Retail Price	Average 1L Retail Price
ONTARIO (75)	5-Mar	5-Apr	2.4	1.28	3,145	\$66.84	\$21.81
Algoma & District (1)	13-Mar	13-Apr	2.2	0.52	3,000	\$65.00	\$22.00
Algonquin (15)	9-Mar	8-Apr	2.4	1.27	4,069	\$67.78	\$23.07
Eastern (6)	1-Mar	7-Apr	2.3	1.37	5,359	\$61.67	\$19.50
Grey-Bruce & District (3)	3-Mar	30-Mar	2.2	1.35	4,950	\$64.00	\$22.33
Haliburton-Kawartha (11)	4-Mar	2-Apr	2.3	1.08	3,960	\$75.38	\$23.18
Lanark & District (13)	8-Mar	5-Apr	2.5	1.44	2,679	\$63.44	\$20.50
Ottawa Valley (6)	12-Mar	19-Apr	2.8	0.83	596	\$72.50	\$22.80
Quinte & District (3)	26-Feb	31-Mar	2.0	1.57	1,408	\$70.00	\$21.00
Simcoe & District (7)	2-Mar	29-Mar	2.2	1.40	1,337	\$72.33	\$23.71
Southwestern (3)	27-Feb	24-Mar	2.2	0.91	750	\$61.67	\$20.00
Waterloo-Wellington (5)	2-Mar	31-Mar	2.0	1.39	4,501	\$49.50	\$17.60

Note: Numbers in the above chart represent averages from the responses except L/tap is total overall value.



Value Added Maple Products				
	Produced by	Average Volume Produced	Average \$/kg	Range \$/kg
Maple Butter	37.8%	150 kg	\$31.00	\$10 - \$56
Maple Candy	27.0%	101 kg	\$39.60	\$20 - \$80
Granulated Maple Sugar	20.5%	105 kg	\$27.26	\$10 - \$44

Other Value Added Products Reported: BBQ sauce (7), maple jelly (5), maple mustard (4), cotton candy (3), maple fruit syrups (2), taffy (2), pepper jelly (2), maple coated nuts (2), taffy cones (2), popcorn, maple peanut brittle, fudge, lollipops, chocolate almond maple crunch, hard sugar, maple pecan popcorn, coffee infused maple syrup, wine, maple meat rubs, maple butter tarts

RESEARCH AND TECHNOLOGY TRANSFER COMMITTEE REPORT

Bob Gray – Thank you!!

Bob Gray stepped away from his position as chair of the RTTC committee in June after a remarkable run. He has led several programs of the RTTC; notably the “buddy sap” and “mold study”. OMSPA recently awarded Bob a very well deserved Award of Merit. We look forward to continuing to work with Bob as he remains a member of the RTTC.

Buddy Sap Research Project

A research paper on the findings of the buddy sap project has been published in the peer reviewed on-line journal PLOS One. It can be accessed by going to the internet site plos.org and typing “maple syrup” in the its search bar. The title of the paper is rather daunting: “Metabolomics reveals plant and microbial driven chemical evolution changes in Acer saccharum sap over a maple

syrup production season”. Follow-on work is proposed to develop an inexpensive field test for buddy sap that can be used by maple producers.

Research and Technology Strategic Plan

The RTTC strategic plan is included in this issue of the Mainline. The content is based on both the 2018 OMSPA membership survey and other input from producers and current research. The plan provides direction for the RTTC over the next five years and will be enhanced as new information becomes available.

Frozen Syrup Experiment

Marian Petelycky, a member of RTTC, completed a “citizen science” experiment on Brix and viscosity at low temperatures. She has written up a summary that is included in this issue of the Mainline.

Phil Thomas, RTTC Chair

MAPLE WEEKEND REPORT

Save the date! OMSPA plans for Maple Weekend on April 3 & 4, 2021.

The OMSPA Maple Weekend Working Group has had preliminary discussions about Maple Weekend 2021. While it was the absolute right choice to cancel Maple Weekend this year, it was still a hard decision to accept. The event had more participants than ever before, with engagement from all locals and significant funds to support marketing. After all our planning, it was hard to see the event not proceed in 2020. It is with this foundation that we are starting to plan Maple Weekend 2021.

OMSPA has funds available under the Canadian Experience Fund grant earmarked for Maple Weekend 2021. The funds will be used to support marketing efforts for the event. The signage purchased this spring is available. We were also able to repurpose some marketing campaigns for 2020 to 2021.

Maple Weekend 2021 will most certainly look different than years. We will have to adapt to ensure we can safely invite customers to our sugar bushes. However, in talking with tourism professionals, we are reminded that our industry is poised to be in a good position to host this type of event. It is held primarily outdoors in wide open spaces. It will be imperative that we investigate protocols and provide guidance to participants. We also need to be flexible and expect that this could change very rapidly. Maple Weekend 2021 will require some vision and innovation, but it will be worth it.

If you are interested in participating or want more information, please reach out to the Maple Weekend representative or president in your local.

Leann Thompson

Chair, Maple Weekend Working Group



IMSI UPDATE

The IMSI conducted a short Zoom call on July 10th...some quick highlights.

Some opening discussion from the President, Pam Green, on how the maple industry adjusts to Covid-19 reality, what do we as an organization needs to do differently and how do we remain focused. There was agreement to outreach to members, especially Associations, by conference call/zoom over the next 3 months to have dialogue about how the IMSI can serve them better. There was also agreement to conduct a quick survey of all members to ask similar questions.

There was continued discussion on the merits of reducing serving size on the Nutrition Facts Panel

(NFP) in the future which would then indicate fewer calories per serving. However it also draws down the percentage of nutrients ingredients one can claim. Canada and the US have maple as different categories....the US calls it as “topping”....Canada an “ingredient”. It is more confusing when each country has a different sugar intake allowance as part of one’s regular diet. We are working through this and had a follow up call with internal maple experts on July 24, however this is going to take time to sort out...if we can ever do so.

Ray Bonenberg
IMSI Director for Ontario



NORTH AMERICAN MAPLE SYRUP COUNCIL REPORT

It has been fairly quiet throughout the summer on the NAMSC front.

The North American Maple Producers Manual is progressing and most chapters are completing the review process now and should be available early in 2021.

The next delegate meeting will take place in

September via Zoom and the NAMSC AGM will be late October again via Zoom.

The 2021 Conference is to be held in Niagara Falls, NY, and the planning is under way. Please consider attending since it is close for many in Ontario.

Brian Bainborough, NAMSC Rep.

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2019 OMSPA AGM UPDATE

Thank you everyone. No doubt you appreciate that the last 4 months or so have been challenging and I will only briefly talk to that at the end of this report. This report to you is for the 2019 year as that is what the AGM and financials address. I would like to emphasize that your Board of Directors is involved in a large number of projects, initiatives and issues. I will only be hi – **lighting some of them. We have a detailed “work plan” which is available through John Williams, our Executive Director. So, in no particular order.....**

2019 was a good year for OMSPA and the Ontario maple industry. It was a good season with strong quality, sales were very good, and we saw considerable activity with Maple Weekend, special events and festivals.

The Sweet Ontario brand is seeing increased exposure, with the introduction of a specialty designed Nu Can with the SWEET ONTARIO brand prominently on the front. We hope that all members will explore participating in using that can in their marketing efforts.

The entire Local chapter group hosted successful Information Days/Maple workshops and our Summer Tour in Kincardine was well attended and a success.

We initiated a revised membership certificate and annual sticker design. You would have received this in the June Mainline. Our membership numbers for 2019 were close to 600 total in all categories.

The partnership with the North American Maple Syrup Council on delivering maple quality assurance workshops was carried in 2 locations and was a huge success. Brian Bainborough deserves credit for accessing funding through both the NAMSC and OMAFRA, and in organizing and facilitating the delivery of these very popular workshops

The hard work of Bob Gray and the Research and

Technology Transfer Committee, in conjunction with researchers from Fanshawe College and Carleton University, saw movement to determine **why and when sap goes “buddy”**. Many producers collected and submitted samples to the researchers **and an official paper on the findings of the “buddy sap project” should be released through accredited journals any week now.**

OMSPA was also successful in getting significant funding to promote maple syrup through social media for not only consumption but to showcase Maple Weekend for 2020 and 2021. This is big. OMSPA received matching funding through the Regional Economic Development fund (RED) **through OMAFRA for \$9,000...which OMSPA matched \$9,000.....and a whopping \$75,000** through a grant through the Canadian Experience Fund (CEF) for advertising, promotion and information relating to the delivery of Maple Weekend. Just to be clear; this is grant funding of 100% of the amount, OMSPA does not pay this back...**this cost members nothing.**

However, I don’t need to remind you that Maple Weekend was cancelled....but....we did receive great exposure and social media posts and videos that can only help our larger marketing efforts for the 2019 – 2020 – and 2021 years. And, we have managed to retain some of that grant money to plan and deliver for the rest of 2020 and into 2021. We must recognize the great work that the Maple Weekend team did under the capable leadership of Leann Thompson for the time period in 2019 in preparation for 2020 Maple Weekend.

And, as part of that funding, OMSPA was able to **upgrade two of our websites....omspa.ca and mapleweekend.ca**

As no doubt everyone is aware, we moved to hiring an Executive Director, which took place in April 2019, to provide strategic and operational support for the Board of Directors. While this is a part time role for John Williams, our E.D., the tasks are many, especially the management of the

respective grant funding and working with the social media consultant we retained to carry out the work.

This revised approach saw an office movement and set up from Kemptville to Midland Ontario with all the changes that go with it. We appreciate your patience as we sorted that out.....

We have maintained good relationships with both the staff and the political leadership at the Ministry of Agriculture, Food and Rural Affairs which is important.

Speaking of relationships, OMSPA returned to the Royal Winter Fair with a one day booth at the Ring of Excellence. We connected with a large number of school groups and families through our interactive booth. Our partnership with the Royal also continues as we sponsored the Maple Competition.

Another partnership shout out goes to Southwestern and Simcoe Locals who participated in the ever popular Breakfast of the Farm hosted by Food and Farm Care. Thousands of urban people attend these breakfasts and make contact with commodity groups like OMSPA.

OMSPA has played a leadership role in the continued discussion with TSSA regarding revised safety regulations for steam operated boilers and vessels. It is not over, but OMSPA, with the producers input, provide liaison and advice to government on this important issue.

Our delegates to the International Maple Syrup Institute and the North American Maple Syrup Council have represented you regarding our interests over the 2019 year.

Our financial situation is strong as will be presented in the Financial report.....

Thank you for your support!

July 17, 2020

Regards,
Frank Heerkens
Vice-president
Membership chair

WHOLESALE MAPLE SYRUP AUCTION

October 22, 2020 (Sale starts at 1:00 pm)

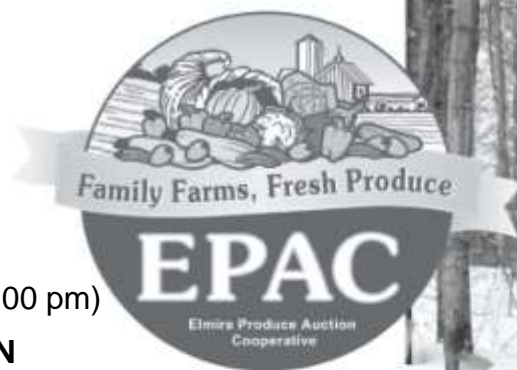
7400 Reidwoods Drive, Elmira ON

Product will be received, starting at 8:00 am on sale day.

Please try to be on site by 10:30, to let us book you in.

All Ontario syrup produced in accordance with Ontario syrup production guidelines accepted. We encourage our growers to state the brix test with each lot, c/w sample bottle. Our wholesale buyers like to see the product in drums, rather than pails, thus we encourage the growers to ship some drums. Containers need to be food grade. Galvanized is discouraged. **For information call: 519-669-3884**

Grower and buyer numbers for the syrup sales are not permanent..



Ontario Maple Syrup Producers Association

Balance Sheet

(Unaudited - see Notice to Reader dated June 19, 2020)

As at December 31, 2019

	2019	2018
Assets		
Current assets		
Bank	\$ 35,598	\$ 101,436
Investments	50,000	-
Accounts receivable	26,820	18,226
Inventory	15,283	5,607
Prepaid expense	1,000	
HST recoverable	742	8,300
	<u>129,443</u>	<u>133,569</u>
Capital assets	1,291	1,614
	<u>\$ 130,734</u>	<u>\$ 135,183</u>
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	\$ 13,931	\$ 10,659
Deferred revenues	8,593	15,547
	<u>22,524</u>	<u>26,206</u>
Shareholders' Net assets		
Net assets	108,210	108,977
	<u>\$ 130,734</u>	<u>\$ 135,183</u>

Statement of Changes in Net Assets

(Unaudited - see Notice to Reader dated June 19, 2020)

Year ended December 31, 2019

	2019	2018
Balance, beginning of year	\$ 108,977	\$ 82,518
Excess of revenues over expenses	(767)	26,459
Balance, end of year	<u>\$ 108,210</u>	<u>\$ 108,977</u>

Statement of Operations

(Unaudited - see Notice to Reader dated June 19, 2020)

Year ended December 31, 2019

	2019	2018
Revenues:		
Grants - OMAFRA	\$ 34,396	\$ 76,730
Memberships	58,613	56,148
Jug program	19,777	22,925
Summer tour	8,887	13,749
Publishing	14,637	7,710
Donations and other	7,091	1,533
Interest income	579	-
	<u>143,980</u>	<u>178,795</u>
Expenditures:		
Administration	30,587	21,640
Advertising and promotion	12,758	300
Amortization	323	404
Fees and donations	5,737	6,051
Insurance	3,763	3,535
Interest and bank charges	1,652	677
Locals	9,967	10,712
Marketing	4,690	354
Office	25,518	13,611
Professional fees	5,253	3,863
Projects and consulting	16,788	70,677
Publishing	9,241	8,954
Research expenses	7,769	-
Telephone	2,667	1,824
Travel	9,568	9,023
Website	4,195	628
	<u>150,476</u>	<u>152,253</u>
Excess of revenues over expenses from operations	(6,496)	26,542
Promotional store	5,729	(83)
Excess of revenues over expenses	\$ (767)	\$ 26,459

Schedule of expenses - Promotional Store

(Unaudited - see Notice to Reader dated June 19, 2020)

Year ended December 31, 2019

	2019	2018
Revenue	\$ 13,755	\$ 23,895
Expenses:		
Purchases	6,677	20,095
Office	-	1,705
Storage	1,300	1,200
Professional fees	49	978
	<u>8,026</u>	<u>23,978</u>
	\$ 5,729	\$ (83)

FROZEN SYRUP EXPERIMENT - Version 2

Background: In this “citizen science” project, three different experiments were performed.

The first experiment used maple syrup which was drawn off a wood-fired pan, filtered and cooled. The syrup was checked for colour and density.

The syrup was determined to be “Amber” and 72.5° Brix using a calibrated refractometer. The syrup was cold packed into several 250 ml glass jars at varying densities (72°, 70°, 68° Brix) by adding water to the 72.5° Brix syrup. The sample containers were labelled and placed in a household up-right freezer and a temperature data logger and checked at 1, 2 and 5 days after placing them in the freezer. The intent was to determine at what density syrup freezes in a household freezer and if there were any visual differences of the syrup which correlated to the density of the syrup.

The second experiment used cane sugar which was made into syrup at varying densities at a greater Brix range (74°, 69°, 67° Brix) to determine if the above experiment could be repeated and if further differences could be seen.

The third experiment used cane sugar which was made into syrup at varying densities (65, 65.5, 66, 66.5, 67, 67.5, 68, 68.5, 69, 69.5 and 70° Brix) to determine at what density the syrup freezes and if there is a correlation of the visual differences in the frozen characteristics of the syrup and the syrup

density,

Purpose: To see if a consumer would be able to tell if a maple syrup was lower than 66° Brix by freezing the syrup.

Apparatus: stainless steel pan, calibrated refractometer, maple syrup reference colour standards, 250 mL clear mason jars, calibrated scale, wax paper, measuring cup and volumetric flask, glass pipette, up-right household freezer, MicroDaq LogTag (temperature data logger), masking tape, marker.

Method:

Experiment 1 - Maple Syrup Solutions

Using a calibrated refractometer, dilution of 72.5° Brix syrup to 72, 70 and 68° Brix solutions using cooled, boiled water and a scale.

Each mason jar was sealed with a metal lid and screw cap. Each jar was labeled with tape on the lid.

Samples were placed in an up-right household freezer with a data logger.

Samples were checked after 1 day, 2 days and 5 days by tipping them over to see if any liquid would move within the container (process of freezing solid in the container)

Observations are listed in Table 1.

Observations:

Table 1:

Time Elapsed Since Placed in Freezer (Temp: -15 to -22C)	Maple Syrup Density ° Brix		
	68	70	72
1 Day	Liquid runny	Liquid runny	Did not run
2 Days	Liquid runny	Did not run	Did not run
5 Days	Did not run	Did not run	Did not run



Observation and conclusion: The higher the density the quicker the “freezing” of the solution. Note: The higher density solutions (70 and 72^o Brix) did not actually freeze but thickened to the point that the solution did not run when tipped.

Experiment 2 – Sugar Solutions

Using cane sugar, weighed three separate amounts onto wax paper using a calibrated scale.
 Placed sugar into 125 mL clear glass mason jars.
 Added cooled, boiled water to make up to 100 grams of final syrup solution using the calibrated scale.
 Mixed thoroughly until no sugar crystals were visible and solution was clear.
 Checked each solution for density content using a calibrated refractometer. Adjusted solutions with water or syrup until refractometer readings were 67, 69 and 74^o Brix.
 The 67, 69 and 74^o Brix jars were sealed with metal lid and screw cap. Each jar was labeled with tape on the lid.
 Samples were checked after 3 days and 11 days
 Observations are listed in Table 2.

Table 2:

Time Elapsed Since Placed in Freezer (Temp: -15 to -22C)	Sugar Syrup Density ° Brix		
	67	69	74
3 Days	Frozen solid, liquid does not run when tipped on side, ice crystal formation seen	Not frozen, thick but runs slightly when tipped on side, no ice crystal formation seen	Not frozen, very thick to point of not running when tipped on side, no ice crystal formation seen
11 Days	Same as Day 3	Not frozen, thick but does not run when tipped on side, no ice crystal formation seen	Same as Day 3

Experiment 3 – Sugar Solutions:

Using a calibrated scale, weighed two identical amounts of cane sugar onto wax paper.
 Transferred each sugar packet into a 1L clear glass mason jars.
 Added cooled, boiled water to make up to 1000 grams of final syrup solution using the calibrated scale for each jar (2 jars total).
 Mixed both jars thoroughly until no sugar crystals were visible and solution was clear.
 Removed a pre-determined amount of solution and mixed with cooled boiled water in 125 mL clear mason jars.
 Checked each solution for density content using a calibrated refractometer. Adjusted solutions with water or syrup until refractometer readings were 65, 65.5, 66, 66.5, 67, 67.5, 68, 68.5, 69, 69.5 and 70^o Brix.
 All jars were sealed with metal lid and screw cap. Each jar was labeled with tape on the lid.

Continued on page 22

Continued from page 21

Samples were checked after 14 days in the freezer.
Observations are listed in Table 3.

Table 3: Observations

Sugar Syrup Sample (° Brix)	Observations after 14 days in Freezer
65	Frozen solid – Complete jar has ice crystal formation
65.5	Frozen solid – Complete jar has ice crystal formation
66	Frozen solid – Complete jar has ice crystal formation
66.5	Frozen solid – Complete jar has ice crystal formation
67	Partially Frozen – Approximately 2/3 of top of jar has ice crystal formation, bottom 1/3 of jar is clear
67.5	Partially Frozen – Approximately 1/3 of top of jar has ice crystal formation, bottom 2/3 of jar is clear
68	Partially Frozen – Just a slight line of ice formation on top of the solution, rest of jar totally clear and thick
68.5	Not Frozen – Very thick - No ice crystal formation seen
69	Not Frozen – Very thick - No ice crystal formation seen
69.5	Not Frozen – Very thick - No ice crystal formation seen
70	Not Frozen – Very thick - No ice crystal formation seen

Observation and conclusion: There is a correlation between ice crystal formation and density of sugar syrup solutions which is clearly visible in a clear, colourless solution and jar. Syrup solutions above 68° Brix do not freeze.

Conclusions:

Syrup solutions above 68.0° Brix (maple or sugar cane syrups) do not freeze or show ice crystal formation when placed in a household chest freezer (between -15°C and -22°C) after at least three days. Syrup solutions (sugar cane syrup) below 68.0° Brix will freeze and show ice crystal formation.

Comments:

To store maple syrup for long periods of time, it is best to store it in a freezer. When required for consumption, syrup can be decanted into a smaller sized container for use. For convenience, if the syrup is denser (greater than 68°Brix), it will become pourable in a shorter period of time, than a syrup density which is less than 68°Brix, which makes it easier and quicker to pour off into smaller container for use. This could be a selling point to consumers for making your maple syrup at a higher Brix level. On the downside, higher density syrup is costlier to make and if too thick will not pass in maple syrup competition grading.

Submitted by Marian Petelycky, RTTC committee

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Maple Mainline Deadlines

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November 15, 2020



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