

Rickson Gary: [00:03](#) Welcome back to Vermont Viewpoint. I'm Rickson Gary. We have extra seasons in Vermont, stick and mud for two another is sugaring season. When we all collectively check Roger Hill's weather reports to see if daytime temps will get up into the mid forties and dive back down to around the mid twenties overnight so that our maple trees will ooze out sap into weighting buckets or tubing. It's a siren's call for sugars to start boiling and for neighbors to gravitate to nearby sugar houses with liquid refreshment in hand as the fun begins. And the net result is that perfect syrup. That's about two thirds sugar content. It's one of the reasons we love living here in the north country, UVM extension maple specialist and host of the Vermont Maple Minute, Mark Iscelheart is back to discuss this recent sugaring season. Mark. Welcome back to Vermont Viewpoint.

Mark: [00:56](#) Thanks for having me.

Rickson Gary: [00:57](#) And listeners to speak with mark or to share how your sugaring season went or maybe is going give us a call at 244 1777 (877) 291-8255 that's 877 291 talk. You can also email vtviewpoint@radiovermont.com. Mark like skiing at Jay Peak until mid May early June, is there any place in the state where the sap is still flowing?

Mark: [01:28](#) Oh boy, there might be. I know there's a producer up in Canaan, which is pretty cold up there, but for the most part, no. Pretty much everyone has stopped collecting at this point. It does reflect the season that that has come and gone.

Rickson Gary: [01:44](#) And is this normal that, by the probably was maybe last week when things shut down, how long do we normally run with a sugaring season?

Mark: [01:57](#) Well, like lots of things. It really depends on where you are and then the weather, but it's not uncommon to have the season ended in mid April. But there were some factors that were unique about 2021 that made it, it's looking like it's going to be a below average crop this year. And I think the key factors were weather and there was also some... A lot of sugar makers saw their sap was less sweet than average. So those two things combined to make the biggest reductions in yield. We won't know the official totals until probably June when the USTA publishes the official reports, but based on the sugar makers I work with and have talked to, it's somewhere in two thirds to maybe three quarters of an average crop. There are certainly individuals who've had less than that. And there are some that

have had closer to a typical year, but I think when you add up all the syrup made in the state, we're going to be in that 66% to 75% range.

Rickson Gary: [03:03](#) Kind of like the percentage of sugar in syrup, right around 66%.

Mark: [03:07](#) And it's especially difficult coming off a year, like 2020, that was such a record year. And so it makes that swing even more dramatic. It's probably going to go down as the season with the toughest production since 2012, when we saw some pretty warm temperatures in that year. And we can talk a little bit about how those two years are similar.

Rickson Gary: [03:37](#) I would love to.

Mark: [03:39](#) Yeah. So whether it is, as you said, it's critically important. It's critically important for the ideal sap flow days. And it's also important for the tree in terms of the growing seasons in the year before, the weather, the precipitation, all those factors, good or bad can impact how the tree is producing sugar during the growing season and how it withstands periods of low moisture. So parts of the state definitely suffered from a bit of dry conditions.

Last year. We think that may have contributed somewhat to the sap sweetness being a little lower than average. There's also a fairly decent seed crop, which can contribute as well. So those things are important. What happened in 2012, however, was really during the season. And if people remember back then in March of 2012, we had five days in the seventies and that really started to plug up some of the sap conducting vessels as a result of microbial contamination, which is natural. It just typical, you see that later in April, it just happened in March. And so that was, that was a big hit.

And we just haven't had that kind of weather since then. So we've seen yields increase over the last 10 to 15 years. So people are getting used to these higher yields, but it wasn't that long ago that the yields, I think we're going to see this year, would have been kind of average. Those people are getting better at managing their systems and achieving higher yields. I do want to say though that there is still a lot of syrup that was made, so there will be plenty of syrup around. So I definitely want to make people aware that there is good syrup out there.

Rickson Gary: [05:32](#) And Vermont is not the only syrup producer, obviously throughout the country. We're number one in production, but

there are other states that do it. Quebec certainly dwarfs us in the amount of syrup produced. Can you tell, have other places had the same kind of season as we did Mark, will it be down probably about the same percentage?

Mark: [05:54](#) Yeah. I think I don't follow the places with quite the same precision that I do Vermont, but from the folks I do talk to, it seems like the same factors, but essentially in 2021, what happened was March was a little colder and there was a slow start to a season. And then when it finally did start, it got warm pretty fast. And that ended pretty quickly. So compare 2020, which is last year, there was only a few days in the 60's in March and there were no days in the 70's in April. It was warm enough for sap flow, but it didn't get that warm in March. In 2021 there were eight to 10 days, depending on where you were in the 60's and which is really warm. And then in April, we're only halfway through and we've already had days in the 70's. It's agriculture you can have all the great technology, but at the end of the day, you're fighting the microbiology of the sap turning. And it's a living plant. So it's going to react to the temperatures around it.

Rickson Gary: [07:06](#) That phrase right there, it's agriculture, something I don't always really think of, but just like our crops throughout the summer, if we don't get the right rainfall, too much, too little, it can certainly affect our corn crop for instance. And all these little things that occur with the climate has that impact on what our sugar crop will be in March and April.

Mark: [07:34](#) So yeah, so many factors and you really can't point to just one or two things. There's so many different things I can contribute that pushes the sugar content one way or the other. So it's not just, there's one factor, it's many factors. And then you have the complexity of not all sugar Maples or red Maples are growing in the same quality stands. You know some soils are better than others. And so it keeps it interesting, but it makes it difficult to point to one or two things. We think in general that sap sweetness impacted the yield by 15% or more. People collected a decent amount of sap, but if there is less sugar in it and you're going to get less syrup for that same amount of volume.

Rickson Gary: [08:24](#) Got you. You're going to boil it down more to get it to the right sugar content.

Mark: [08:31](#) Right.

Rickson Gary: [08:31](#) Yeah. Interesting. And as far as how a down season like this, the impact it might have on the price of syrup, I know there's the

cartel up in Quebec that stores a massive amount to even things out when there's good seasons and bad seasons. So will sugar makers see much of a difference in price based on the down season we've had.

Mark: [08:58](#) Well, I've already heard reports that bulk price of syrup, the price being offered to the producer if they sell in barrels to a packer, that price has already crept up and where it ends, it's hard to say. I think the industry has been really good at marketing and selling maple to, not just people regionally, but nationally and internationally. So I think the demand is there. And if the demand is there, they need to fill those orders. And so they're going to try to get as much as they can from the producers. I definitely think producers will see bulk prices go up. Where it's going to end, it's hard to say for sure. I'm not sure about retail prices. I don't know if we're going to see those creep up as dramatically. It's hard to say, like I said before there will be syrup around. So people shouldn't panic

Rickson Gary: [10:00](#) No maple panic yet folks. Mark, when did, and I don't know if you actually do this, but when did you this year pretty much raise the white flag on sugaring season when you knew all right, that's it, it's over?

Mark: [10:16](#) Well, it's a good question. It's hard to... It really comes down to an individual decision. Are they producing a product that they have a market for? And we talk almost always about grade A syrup. Syrup that would go in a retail container, be sold directly to the consumer or sold in bulk to a packer who would then repackage it. But producers do make syrup that doesn't meet that standard, but it still has a market. So it could be used for any number of other products that want to use pure maple syrup as a sweetener, as opposed to a grade A. As long as it meets the standards for processing grade. So producers will make their own decisions about when it's time to pull the plug. The old timers might remember once you stopped making fancy, the season was over.

People can still do that. It really depends on their cost of production and what they have invested. And in some cases what they have to meet for loan payments for their equipment and land. And so I think producers will decide for themselves what makes the most sense if they're in it for business and if they're in it for a hobby, maybe they're tired of collecting sap. And if it doesn't meet the quality they want, they will be able to say, it's time for us to be done.

What was unique is that many producers saw a change really quickly this year. And a lot of times it's a slow progression. Typically, you'll make darker syrup at the end of the season. And then you might start to get a hint of some sort of off flavor. I think we spoke one time and you got to taste a few of them.

Rickson Gary: [11:59](#) Yes indeed.

Mark: [12:01](#) So sometimes that comes incrementally and slowly and it can be tricky to figure out that something's going on. Other times it just comes all at once. And it's an easy decision to stop.

Rickson Gary: [12:12](#) So let's talk about what's up next for sugars. How soon should they be removing taps, taking down lines, things like that, Mark?

Mark: [12:20](#) Right. Well, for the most part, most operations leave their tubing up year-round but there is the process of pulling spouts and that can start right away. The tree, even though we were seeing some bud break out there and some of the colder areas, it's still a little bit delayed. Hopefully more so because we know, and I'm sure Roger would say this, that we are going to get a frost again. And one of the concerns is that we get enough warm weather, the trees start to unfurl those tender little leaves, and then they get hit with a frost. So we're hoping that won't be the case, but sugar makers can pull spouts now and get them out as the tree starts to exit dormancy and start growing again and healing over those tap holes. So they can do it. And as soon as they can get to it, that's great. And you just want to make sure that you're pulling them and getting getting the system ready for the next year.

Rickson Gary: [13:23](#) Roger just told us this morning that we can expect some snow later this week, specifically in the south and central part of the state. So that could get interesting, but now what maintenance should they be conducting to make sure that the equipment is clean, ready when they get restarted next year?

Mark: [13:46](#) Right? So everything in the sugar house is going to want to be drained and cleaned and rinsed. And there's a calcium material called sugar sand or niter that builds up as you're boiling, that all needs to be cleaned off one last time and things need to be put away clean so that they're ready to go next season. The tubing system it used to be more common that people would flush water or some cleaning solution through the tubing systems. That's becoming less and less common, part of it has to do with it's a lot of work, but we're not seeing on the research

side, we're not seeing such a huge benefit in terms of yield and quality as a result. It certainly, if done properly, it can have a benefit, but if you don't do it right, it doesn't really make a whole lot of sense.

And it is a lot of time to be going out there. Cause you have to go back to every single tree multiple times. If you're doing that, cleaning spouts, including cleaning the tubing and you know, other things that are best done when the sap isn't running. Making repairs to the tubing system, those things can be done. If the forest management plan for your sugar bush calls for it, maybe you would take down some main lines and get ready to do that harvesting when things dry up or anticipation of whenever the plan calls for that. So there are some things to be done. A lot of folks, it's not their year round gig, so they would be going on and getting back to the business of earning a living from other non maple sources as well.

Rickson Gary: [15:25](#) And this might not be this particular year, but I'm wondering, especially for sugar makers who were looking for things that might help the process, any new equipment or processes that people utilized this season or the last few seasons that bear mentioning that might make sugaring easier or better for people more productive?

Mark: [15:49](#) Yeah. I don't think it certainly is ever going to be easy.

Rickson Gary: [15:54](#) That's right.

Mark: [15:54](#) So I think things that will allow you to spend less time searching for leaks in your tubing system, by the way you plumb it and where you put vacuum gauges and valves, or using more modern vacuum sensors that it can be tied to your phone. Those things have helped people, just the basics of doing a good job in the installation, making repairs when you need them, running a vacuum appropriately, it's the basics are really still really important.

You don't have to do anything too extravagant just doing the basics right is really important. I forgot to mention that people do want to read more about how the season progressed. I do a blog called "Vermont maple bulletin" and that is available online. If they search for that, they can see it's about every week or so I get reports from producers around the state. You can get a little bit more detail of what just happened.

Rickson Gary: [16:52](#) Oh, that's excellent. And how about resources for people, especially backyard sugar makers who want to take things to the next level?

Mark: [17:02](#) Sure. Yeah. And that's one thing that the pandemic and folks spending more time at home. We've definitely seen a lot more interest in collecting sap at home in a hobby realm. Folks are welcome to reach out to me. I can help. We have resources on the UVM extension maple page, got lots of resources there, including some basics of a backyard sugaring. Plenty of videos that we've done recently, along with the Procter maple research center about sugaring.

There's a lot of stuff on the internet, but not all of it is research-based-

Rickson Gary: [17:02](#) Right.

Mark: [17:39](#) ... And rooted and careful experimentation. So I would caution people from just taking the first thing they saw online and going with it. I'm certainly available to help people and if they want to get into it, and there are people who are happy putting out a few buckets and learning how to do it. And then people who want to take that hobby a little bit more seriously, and the industry has evolved to support them as well.

Rickson Gary: [18:12](#) Absolutely. I'll mention those resources again, Mark's blog is "Vermont maple bulletin." And if you need more information about sugaring UVM extensions, maple page is where you can go to. Mark Isselhart is the UVM extension maple specialist. He's the host of a Vermont Maple Minute. Mark great to have you on throughout the sugaring season this year. So thanks so much.

Mark: [18:33](#) Great. Thanks Rick.

Rickson Gary: [18:33](#) Take care. And that is our show for today. Vermont viewpoint is produced by Shayla Conner Schapiro directed by Danny McGivergen and our email address is vtviewpoint@radiovermont.com. Feel free to suggest topics or guests. Love to hear from you. You can also listen to past episodes of Vermont Viewpoint by downloading our podcast at wdevradio.com. Common Sense radio with Bill Sayre is up next. I'm Rickson Gary I will meet you back here tomorrow.