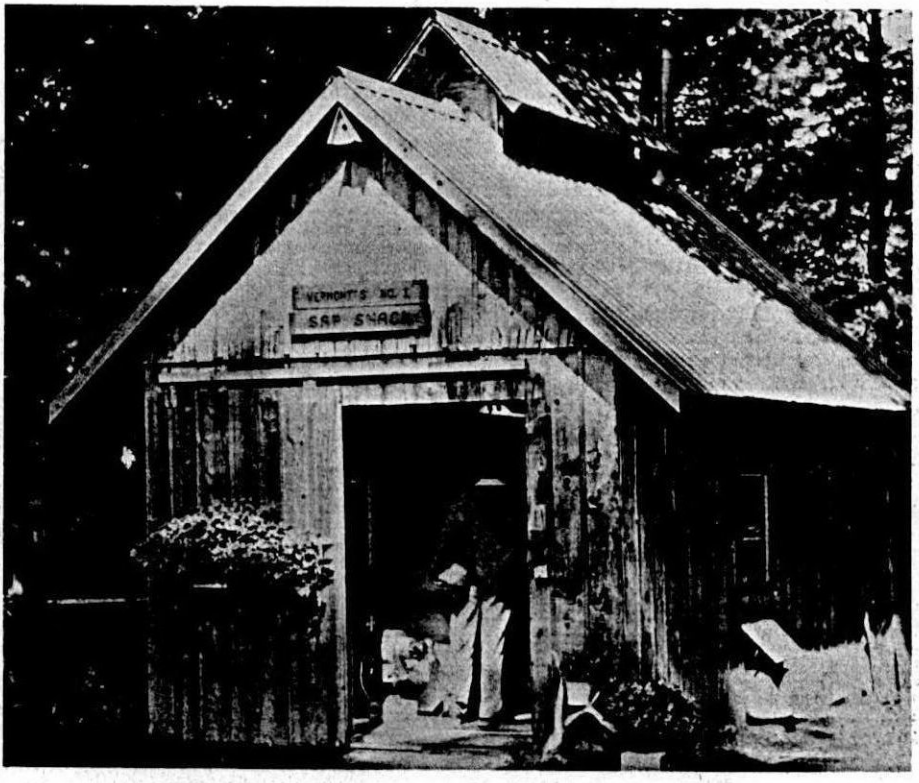
MAPLE SYRUP DIGEST



Vol. 23, No. 1

February 1983

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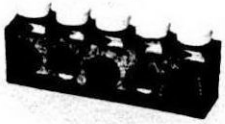

MAPLE SYRUP COLOR KIT – – – –

for grading consisting of a stainless steel holder 7" long with 5 slots, for 1 oz sq. bottles; 3 slots have amber shaded glass pieces, imported from Germany and ground for us by a professional company who have matched the three pieces to co-inside with the Master sets at the U. S. Bureau of Standards for Maple Syrup in Washington, D. C., as evidence by light meter curves supplied to us, being correct to market.

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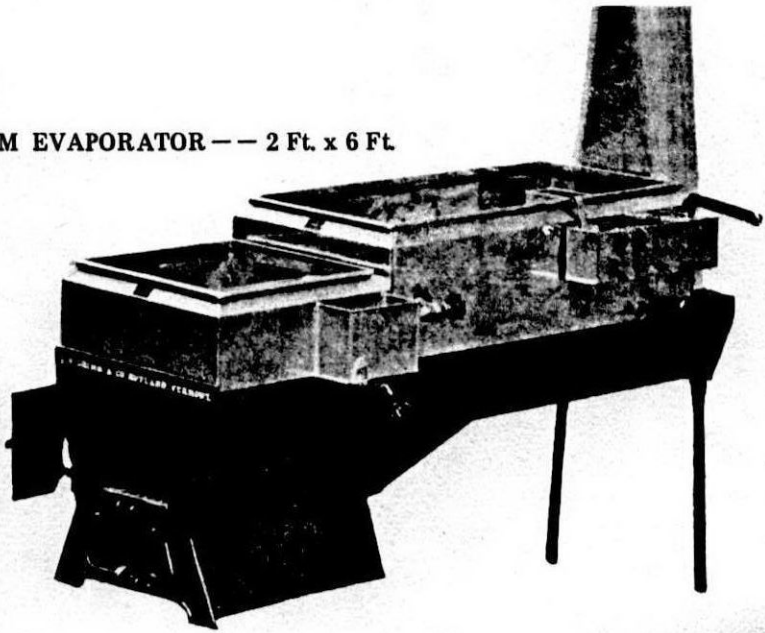

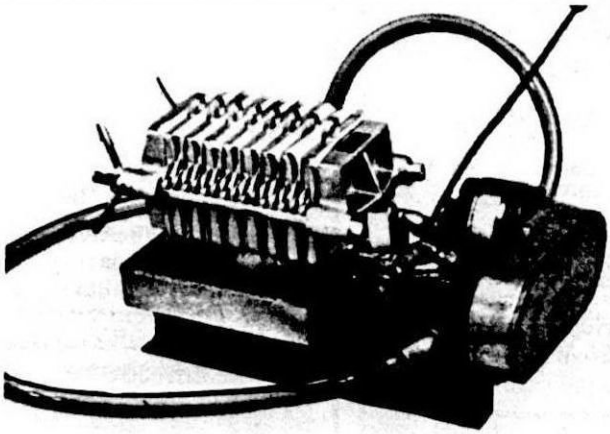

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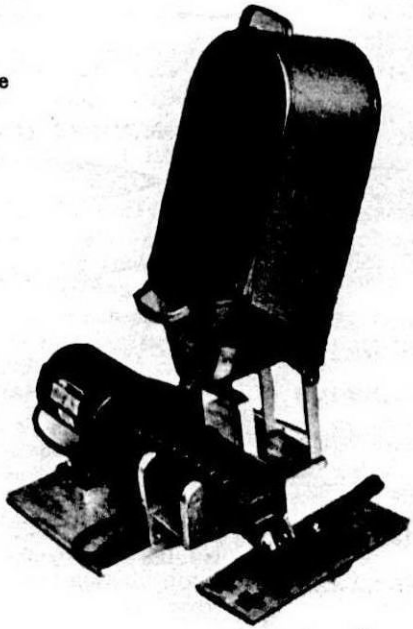

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THE MAPLE SYRUP DIGEST

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COVER PICTURE

Vermonts No. 1 Sap Shack, operated by Bill & Moe Wildes, Morrisville, VT. It's picturesque outside, with modern equipment inside. Their 150 gallon production from 400 taps combine quality and nostalgia.

Photo by: Bob Lamb

Editorial

I guess we've got a lot to be thankful for as far as the maple industry is concerned. The future looks good, too. Sure, we've still got surplus to contend with but it's much smaller than last year, thanks to more promotion by producers and associations.

The best part is that the U. S. Government kept it's fingers out of the pie. They haven't subsidized production to increase the surplus nor have they purchased syrup to keep the price up. I haven't heard of any tax on our production yet, either. They've let the chips fall where they may and the law of supply and demand will eventually take care of it.

It's going to take another year at least to entirely dispose of the surplus and I recommend we should all be careful about our production again this spring. If we produce a little less but more efficiently and economically instead of trying to beat our neighbor or some guy we don't even know a hundred miles down the road, I think we'll all be better off.

If this sounds like a take-off on the milk business, it's because I intended it that way. Thank the Good Lord you're making a product you can set your own price on, whatever you think it's worth, and Uncle Sam doesn't want to meddle with - - so far!

We've got one problem, though, that looks bad. As you already know, our research institutions have had their budgets drastically reduced and may be eliminated entirely. Now, the Extension Service, who has been so helpful in past years, is running out of money. In New York, I understand, the maple program has been cut from the 1983 budget. Somehow, they're going to sponsor the winter maple schools anyway this year, but maybe not next year. We'll all do all we can to keep them in business but it looks like an uphill battle.

This makes it more important than ever to keep the Maple Syrup Digest in business. We did all right last year, thanks to your help, the associations and advertisers. The Digest could be the only communication we'll have in the future so use the return envelope in the center of this publication and send in your contribution. We can still make out on $2.00 a year or three years for $5.00. Be sure your association is supporting the Digest as a group. Some aren't so you'll have to do it yourself if you want it to keep coming.

Thank you for your cooperation in past years and with your help now, I'll do my best to give you more than your moneys' worth. I hope you all have a good, prosperous year.

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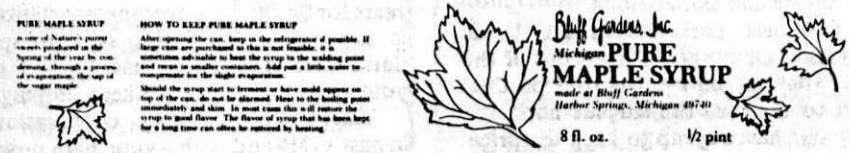

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FROM THE CHAIRMAN

The maple industry seems to be in pretty good shape. The producers are doing a good job as there is an ample supply of syrup at the present time. Technology has come a long way in recent years with new processes and systems to use in maple. A great deal of this technology has been proven by the tireless work of our research and experimental laboratories. The handwriting on the wall tells us this work may come to an end.

It will be up to the maple industry to come up with alternatives. Maybe private individuals and the companies who manufacture maple equipment will have to do this work. It seems that the industry itself must support some of this research.

Could the Council be agent for funds to be allocated for research? The best solution, of course, would be to have an on-going program carried on as in the past. Don't hold your breath - - it doesn't look as if it will happen.

The 24th annual meeting of the North American Maple Syrup Council will be held in Traverse City, Michigan, the week of October 25. Whether it will be a 2 or 3 day meeting will depend on the amount of material to be presented. This will not be a combined meeting with I.M.S.I.

I invite anyone who has pertinent material and ideas that might be added to the program to contact me or any of the delegates.

Yes, things are tough, but that's when the tough get going.

Russ Davenport

Women's Page

Editor, Mary Lou Sipple

Here is a recipe from the Woman's Day which is very good:

SAUSAGE–CORN BREAD SKILLET

8 oz. pork sausage meat
1 medium onion, chopped
½ cup each flour and cornmeal
1 tablespoon sugar
2 teaspoons baking powder
¼ teaspoon *each* salt and thyme
2 eggs, slightly beaten
1 cup milk
½ cup water
Pure Maple syrup

In 8" cast–iron skillet or other oven–proof skillet, cook sausage meat and onion until sausage is browned. In bowl mix well flour, cornmeal, sugar, baking powder, salt and thyme. Stir in eggs, milk and water until well mixed. Stir into undrained browned sausage mixture. Bake in pre–heated 425 degree oven 20 to 25 minutes or until golden brown. Serve in wedges with Pure Maple syrup. Makes 4 servings.

HOT MULLED CIDER

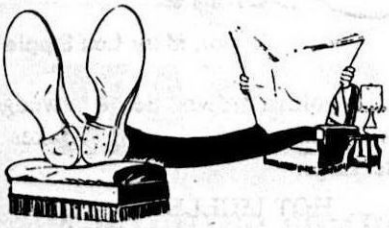
1 gallon sweet cider
2 cups Pure granulated maple sugar
2 sticks Cinnamon
a dash nutmeg
1 tsp. whole allspice
1 tsp. whole cloves
1 lemon, sliced thin.

Combine all ingredients, bring to a boil, then simmer 20 minutes. (Put whole allspice and cloves in a tea ball or cheesecloth bag.) Remove spices before serving.

This is a recipe I revised to use Maple.

THANKS TO ELLEN ADAMS of Smithville Flats for sending these recipes.

BOB LAMB'S CORNER



BUCKETS, TUBING, SOAP, DETERGENT, CLOROX, ETC.

Washing buckets and tubing incorrectly has probably caused more off flavored syrup than all other causes put together.

Before Dr. Willits retired as head of the Maple Laboratory in Philadelphia, he always stressed cleanliness as the best way to produce top quality syrup. He proved it by keeping the sap practically sterile from the time it left the tree and it always made extra light syrup. Of course we can't always do that but we can come close.

I told him once that if he would stop killing all the little bugs you can't see and start finding out how many you have to have to make old fashioned maple syrup he would be doing something. He never answered me. He just looked out of the corner of his eyes and I knew he was thinking, "poor boy - - - no hope". But, of course, a little fun now and then wasn't all bad. He was probably more right than I was but too much of the wrong kind of cleanliness could cause a lot of trouble.

Years ago some tried washing with a detergent. It seemed just about impossible to get all of it out. I remember one party washed with a pink detergent and ended up with pink sap. Some others said their first syrup had a bad flavor; that it took a good run to clean up the buckets. It turned out they were right. Never use soap or detergent for washing unless you know a lot more about it than I do.

Chlorine has been accepted, so far, as the best cleaner for sap equipment, and Clorox is the product most commonly used. Some use swimming pool powders or milk equipment sterilizers but you've got to be awfully careful about what's in it and not to use too much.

Clorox is volatile and most of it will boil off in the evaporator but there is a limit. If you use too much, you'll probably make some off flavored syrup.

Years ago we started with a solution of 20 parts water to one part clorox. This seemed to work okay, but some made it stronger "just to make sure". One gentleman told me that he just added clorox till the solution was slippery. Of, course the results were off flavored syrup. As the years went by, most people reduced the solution to as little as 1 part clorox to 40 or even 50 parts of water. This seemed to do a good job. Then they just drained it out of their buckets and tubing and all was ready for the next season.

Dr. Morselli of the University of Vermont recommends a final rinse of clean, clear water after the washing. This is fine for not leaving too much clorox in the buckets or tubing. It's the sure way but it brings up another problem. You have to have good, clean water.

I have experimented with well water, spring water, creek water, lake water, rain water and just about any type of water that will splash. I found if I did not use good, clean water as a final rinse, algae or mold spots showed up inside the tubing. If good water is not readily available, it's probably best to just drain out the buckets and tubing as thoroughly as possible but be sure the solution is not too strong.

Another reason for not using a strong solution is rodent damage. The residue left when clorox and water dries up is a salt. Too much makes the tubing taste salty which is just what the little critters like. I have no concrete proof but it makes sense that a weak solution or a water rinse will

minimize the rodent damage.

If you leave your tubing on the trees the year around, you've got another ball game. Some are leaving the spout in the tree. This is a no - no. It restricts healing of the tap hole the first year.

Whether: you use a weak chlorine solution or a stronger solution with a water rinse, there is usually some spots that do not drain out. Some blow it out with a portable compressor or hand carried compressed air tank but it's impossible to get it all. Others let the first run drain out on the ground the next spring. This wastes sap and still doesn't do a good job.

Sunlight is supposed to kill bacteria. Maybe it does, but it also shortens the life of the tubing. Maybe I should approve this practice so I could sell more tubing, but I still think it should be taken in, thoroughly cleaned and stored in a cool, dark place.

I used to tell Dr. Willits that it did not matter how many bugs you had as long as they were dead bugs. He didn't go along with me there either. As I said before, a fellow has got to have a little fun.

Of course, if you are having good results with your present method, I'd advise you to continue it and not believe a word I have said. I can't argue with success.

Bob Lamb

SAP PRICES

This year we are repeating last year's sap prices because syrup prices have remained about the same. We're printing it in case you may have mislaid last year's copy.

Please remember, this chart is pubished to be used only as a guide and the Digest in no way intends that it should dictate the price paid for sap by any producer.

Year	1981	1982
Retail	22.00	24.00
Wholesale	16.50	18.00
Sap Brix	per. gal.	per. gal.
1.5	.034	.037
1.6	.048	.055
1.7	.062	.07
1.8	.076	.084
1.9	.089	.097
2.0	.10	.109
2.1	.11	.12
2.2	.119	.129
2.3	.127	.138
2.4	.136	.147
2.5	.142	.155
2.6	.151	.164
2.7	.158	.172
2.8	.166	.18
2.9	.173	.188
3.0	.18	.196
3.1	.188	.204
3.2	.196	.212
3.3	.203	.22
3.4	.210	.288
3.5	.217	.236
3.6	.224	.244
3.7	.232	.252
3.8	.239	.26
3.9	.246	.268
4.0	.254	.276

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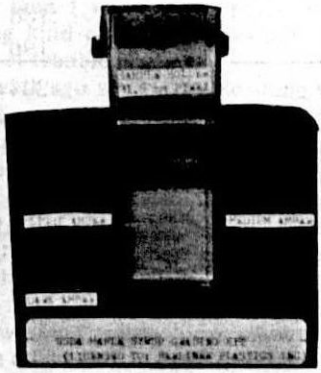

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Off-Flavored Syrup

by
Gordon Brookman

I've just finished a job of judging pure maple products where I worked with two other very capable judges. I think a team of three is as fair a way as possible to judge anything and I'd like to pass on a little of the experience I've gained.

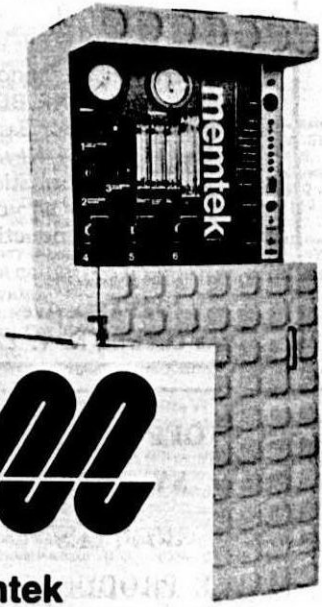
I know how much effort it takes to produce maple syrup and the various types of maple sugar. It's also a lot of work to set up a display at a fair or festival or to participate in a contest or sales booth. Anyone who does this should be given credit and thanked for their loyalty and contribution to the maple industry. But there's a question in my mind that's left unanswered.

Why do producers send off-flavored syrup to be judged, sold or displayed? Why go to the effort to produce cream or sugar with off-flavored syrup when the flavor always carries through? Why sell off-flavored syrup in any container other than commercial drums for commercial use? I have even been given samples of off-flavored syrup on maple tours. If I was a potential customer I would never buy the product because of the bad taste.

In my judgement there is no excuse for such laxity by any producer. We all know that density, clarity and color are important but when all is said and done, flavor is the most important characteristic of all.

Producers, be sure to taste your syrup before you pack it for sale, or display. Someone in your family is sure to be able to detect off-flavors. There is nothing better than a true flavor and nothing worse than an off-flavor.

MEMTEK REVERSE OSMOSIS



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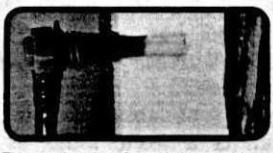
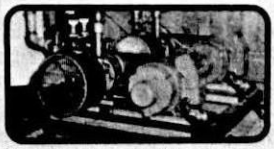


The sap is taken from the tree with use of a 5/16" threaded spigot. The sap then flows through 5/16" tubing to the main lines.

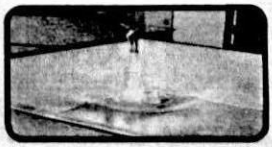
A double fork is used to connect the 5/16" secondary lines to the main line.

The main lines convey the sap to the sugar house.

In the sugar house, the sap flows into a vacuum release tank, which is connected to a pressure regulating tank.



Vacuum pumps are used to create a suction in the release tank. This vacuum action causes the sap to flow through the tubing to the sugar house at increased flow.



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Maple Kill in Delaware County

by
August Andersen

The great maple kill in Delaware county was caused primarily by Forest tent caterpillars and helped by Gypsy moths and Eastern tent caterpillars.

It began in 1979 with the greatest losses in the spring of 1981. The 1981 defoliation killed the most trees in this area. It seems that hard maple can stand defoliation in various degrees. Some maple tree stands can tolerate up to three years of defoliation with little loss and other stands are killed by one year of defoliation. There seems to be various reasons for this phenomenon. It could be due to dry weather conditions following defoliation; too early fall frosts killing late formed tender buds, or just a high concentration of caterpillar population. No one seems to really know why.

I have observed that the trees that were stripped and "polished" by high caterpillar populations died. If a little leaf stem was left (trees not polished) the tree would leaf out the following year. With weather conditions being the same in a county base area and the killed areas varied; I would tend to conclude that the population would be the determining factor on how many trees were killed, because in the kill areas, it killed all trees, young and old alike.

There is the possibility, that the caterpillar emits a toxic saliva as it eats. When the caterpillar population is high enough, it actually poisons the trees by biting into the terminal bud and small branches.

The big question is: How do you save the sapbush? We aerial sprayed our sapbush by airplane using sevin-4 oil. We had a leaf saving that rated 50% - 100%. The caterpillar population in some areas was so great that they

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Chapter Three: Saving Energy - Maple Syrup

Improving Combustion Efficiency in Maple Syrup Production - Part II

Clifford C. Wassel, New York State Energy Office

RECAP

Part I of this article discussed some of the basic elements of combustion in an oil-fired evaporator and appeared in the December 1, 1982 edition of this digest. Warning signs of inefficient combustion discussed in that article were:

1. excessive stack temperature
2. air leaks in the fire box
3. sooting and mineral deposits
4. evaporator over-firing and
5. poor air fuel mixing

We will now discuss evaporator smoking and the use of wood as a fuel for producing maple syrup. While wood burning evaporators were not tested in our survey of producers, there was high interest in the use of wood as a fuel expressed by maple producers at the October seminar series. The last part of this article deals with wood and how it compares with other fuels.

SMOKE

Smoke is caused by incomplete combustion of the fuel. The most common cause is insufficient combustion air, but poor mixing of fuel and air and the flame striking a cold surface can also cause smoke.

The smoke causes three big problems, air pollution, unburned fuel going up the stack and soot deposits on the fireside surfaces of the evaporator pan. Soot on the evaporator pan causes inefficient heat transfer and excessive heat loss.

SMOKE READINGS

A simple instrument is used to make the smoke test. This test is performed using the same hole as the CO_2 test. A sample of gas is drawn from the fuel through filter paper. If spotting occurs, the paper is compared to a smoke scale. Smoke scales used judge the level of smoking from a 0 to 9 measure (nine being the darkest spot on the scale).

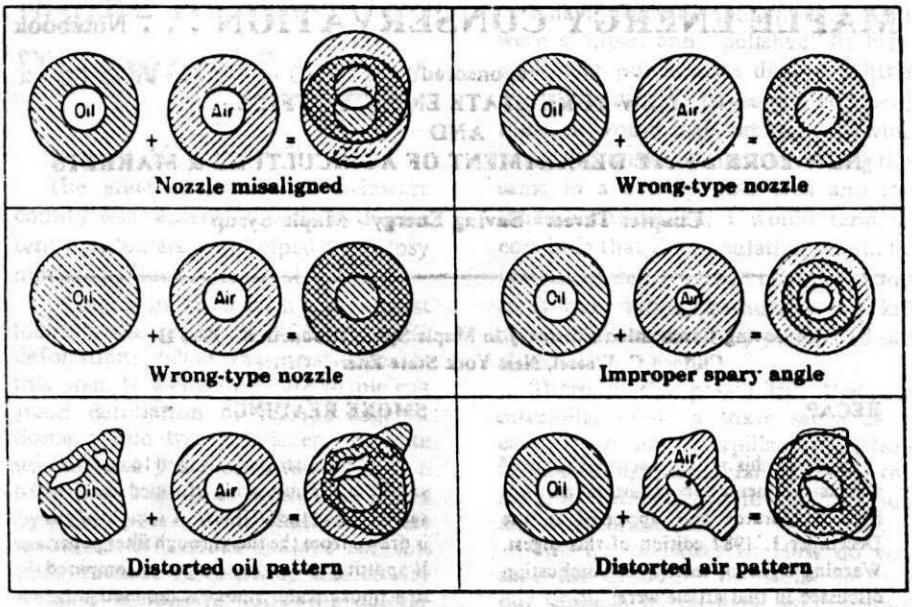
Always test for smoke when performing a combustion efficiency test on a unit. Combustion efficiency percentages found on efficieny tables assume no or very light smoke (0 to 1 or 2 on the smoke scale). The relationship of stack temperature and oxygen or carbon dioxide to combustion efficiency is calculated under this premise on combustion efficiency tables. Therefore, if the unit is smoking that condition must be cleaned up first before the unit's combustion efficiency can be determined.

CAUSES OF SMOKE

Smoke is caused by:

1. Poor air-fuel mixing;
2. Flame impingement; and
3. Cold start up.

1. Poor air-fuel mixing is a cause of smoke and changing the burner nozzle to a different spray pattern and/or angle may help. It is all important to match oil spray and air flow patterns to produce high carbon-dioxide levels without producing smoke for maximum efficiency.



Common Causes of Smoke

The figure above shows situations where an oil spray nozzle is not properly covering the air flow pattern. New nozzles should be periodically installed to avoid distorted oil patterns.

2. The flame in the firebox should be adjusted so that it does not strike surfaces because this impingement also produces smoke. When the end or edge of the flame pattern strikes the evaporator pan or another cold surface, the flame will be cooled in that combustion zone to a point where combustion ceases and smoke and soot forms. Proper fuel spray patterns, length and direction will help eliminate impingement. Defective or partially clogged nozzles, improperly set electrodes (distorting the spray pattern) and oil pump pressure being too low will also cause smoke.

3. Start up smoking may occur because of a lack of temperature in the fire box. This is caused, as in flame impingement, by the flame being partially extinguished because of a lack of temperature. Lightweight fire box material which heats rapidly will control this and should be used when rebuilding a combustion chamber. Smoke testing should be done after the equipment has been operating at a steady operational state so that a true reading is obtained.

WOOD AS A FUEL

Wood was the primary source of fuel for maple syrup evaporators in the past and is used extensively today. Wood is available in all sugar bushes, does not require a cash outlay to obtain, except for labor costs, and sugar bush pruning improves the quality of the maple grove if done selectively.

When the widespread use of oil was adopted as a home heating fuel the availability of the product gave maple syrup producers a choice of fuels. Oil did require out of pocket money to obtain but:

1. did not need to be seasoned;
2. required less space to store;
3. did not require a great amount of time and physical labor to obtain and;

4. the heat was more constant and could be immediately turned off to prevent boil over.

Despite these many advantages of oil as an evaporator fuel, many people still use wood because they are willing to live with its associated characteristics and have equipment to utilize it.

HEAT CONTENT OF WOOD

The amount of energy contained in a full cord of wood (128 cu. ft.) varies by over 100%. For example:

–one pound of wood at zero percent moisture yields 8,600 Btu's;

–twenty percent moisture wood yields 7,167 Btu's per pound because of the weight of the water;

–a cord of wood with twenty percent moisture varies in weight from 2,080 pounds for white pine to 4,240 pounds for shagbark hickory; and

–if number two fuel oil is burned at 65% efficiency and wood at 50%, the full cord of white pine would be equivalent to 83 gallons of oil and the hickory to 167 gallons of oil.

I suggest burning as dense a wood as available to gain the maximum heating value per unit of volume.

BURNING WOOD

Seasoning wood is one of the most important aspects of its efficient burning. Green wood contains 50% moisture and should be air dried, under cover, to reduce the moisture content to 20% or less. A twenty percent saving in combustion efficiency can be realized by drying wood from 50% to 17% moisture.

Burning wood like any other fuel requires sufficient quantities of combustion air to burn completely. Smoke can be avoided by providing enough air, so that losses from unburned fuel do not occur. High moisture wood requires more air, decreasing its efficiency.

Combustion efficiency testing of wood burning units can be done by measuring the oxygen in the exhaust gases and the stack temperature. Oxygen is used as the measurement gas because it better determines excess air, the stack temperature measures heat loss up the stack.

So I suggest:

1. Make sure the wood is as dry as possible;
2. Provide enough air to burn it completely, and prevent sooting; and
3. Make sure you control the air so that not too much heat is blown up the stack.

COMBUSTION TESTING

Combustion test kits cost about $200 to $500 and can be obtained from heating equipment suppliers. If you, as maple syrup producer, spend $4,000 or more for fuel oil, then consider buying a combustion analyzer and use it frequently to adjust the burners. A 5% increase in efficiency will payback the $200 outlay for combustion test equipment in one year. At least buy a smoke tester and thermometer and do this test after daily operation. Make sure a combustion analysis is done. Flue gas tests should be run during burner maintenance times.

I strongly recommend that maple syrup producers insist that maintenance personnel use test equipment and report to the operators any changes in combustion efficiency. When oil was relatively cheap to purchase, the flame-sight method may have been acceptable, but high oil prices have made it absolutely necessary to get the best efficiency for every fuel dollar spent.

If you have questions about combustion and energy efficiency, call me at the New York State Energy Hotline at the toll free number, 1-800-342-3722.

Remove and save this centerfold. Use it as a maple energy conservation how-to-do it manual. New chapters will be published periodically in the Maple Digest. Contact the Department of Agriculture and Markets for reprint permission or prints.

This project was funded and carried out through the cooperation of the New York State Energy Office, New York State Department of Agriculture and Markets, the Agway Foundation, the A. Lindsay and Olive B. O'Connor Foundation, the Richard and Rebecca Evans Foundation, the Maple Digest and the New York State Maple Producers Association.

ate into the sprayed area around the edges, approximately 2—3 hundred yards. It was in these areas that we had a chance to compare trees that were completely polished against trees that were partially eaten to see which one died and which ones survived.

The newly developes sapbush areas were not sprayed and died in one defoliation. The timing of the spraying is critical. The forestry people say to spray when the caterpillars are small, about ¼ inch long. We sprayed the caterpillars when they were ¾ inch long. My reasoning for this, is that at the quarter inch stage, the caterpillars are gathered together in a small spot and eat only one leaf per day; on cool days they don't eat at all. Many of them are sitting on the lower branches and would not come in contact with the spray. If the sprays killing power lasts 5—7 days the caterpillars must be actively eating in order to get a good kill. Also, depending on weather conditions, the caterpillar hatch can be spread over a two week period.

If the trees are sprayed too early, the first batch is killed and the later hatches move up and eat what is left.

Did spraying do any good? Syracuse University did some studies in our sprayed sapbush with the following results. In areas where we saved 100% of the leaves, the 1982 sugar content averaged 2.8%. In areas where we saved 50—75% of the leaves they averaged 2.4%. In non sprayed areas they averaged less than 1% and many of the trees died.

If your area is threatened by a forest tent caterpillar outbreak—don't wait!!! Spray them the first year because you can loose your entire sapbush in one years defoliation. We have seen it happen here in Delaware County. The state forestry department estimated that 200,000 acres were stripped in Delaware County. Some landowners and lumber companies in the township of Hancock completed a survey on the timber kill and it shows 26,000 acres of dead maple in our township. I wonder what the total acreage kill in Delaware County is?

It's beyond my comprehension that the Department of Enviornmental Conservation could sit idly by and watch thousands of acres killed that will take 75—100 years to replace. People lost their sapbushes, businesses and their life savings by having timber lots reduced to brush lots. The loss of this timber crop affects all people in the country. I hope our politicians wake up to this fact.

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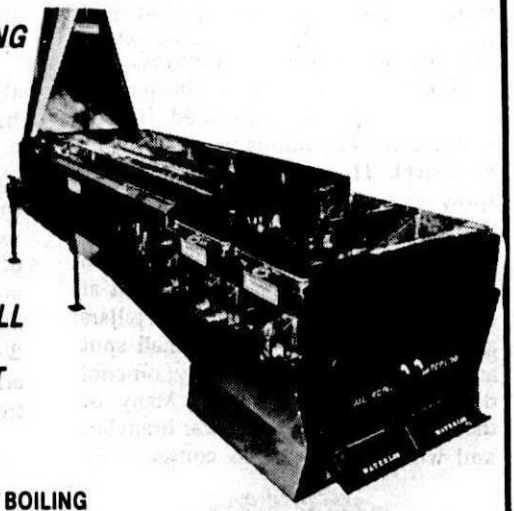

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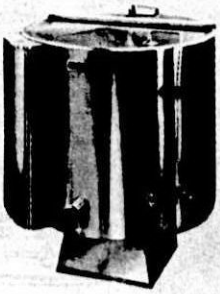

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LONG-TERM SAP FLOW & SIRUP PRODUCTION IN TWO SUGAR BUSHES

by
Robert R. Morrow

Long-term records of maple sap flow, mean sap sugar percent, and sirup production provided much data that improved or confirmed previous knowledge of the subject. Other data were inconclusive and sometimes indicated areas where more knowledge is needed.

Sap flow was consistently higher in the warmer sugar bush, it increased with time and the application of new knowledge, and it was highly correlated with sirup production. Data on frequency of sap flow, especially in mid-season, are much more reliable and perhaps more important than data concerned with the beginning, end, or length of seasons. The detrimental effect of early unseasonable warm temperatures on sap flow was characterized and documented.

Unlike sap flow, mean sugar percent tended to decline with time and was negatively correlated with sap flow. In addition, we failed to find it related to tree growth. Although mean sugar percent is less variable and more difficult to measure than sap flow, our lack of knowledge strongly suggests that more research be directed toward it.

Single copies of the complete paper may be obtained free of charge by writing to Ms. Deborah Grover, 104 Fernow Hall, Cornell University, Ithaca, New York, 14853-0188 (additional copies - $2.00 each).

American Maple Museum

by
Hugh Worden

The Board of Directors of the American Maple Museum has set Saturday May 14, 1983, for the annual Maple Festival and Induction into the Hall of Fame. The festival will be held at the American Maple Museum at Croghan, New York.

This years program will be a full day festival with many activities during the day. Highlights will include the induction into the Hall of Fame at 11:00 a.m., maple parade at 1:00 p.m, and pancakes being served from 8:00 a.m. until 3:00 p.m. Also the museum will be officially opened for the year.

There will be two new additions to the museum this year. First there is a large new completely remodeled room for the Hall of Fame with new display stands for the pictures and plaques. Second we have added a lumbering and logging display. Thanks to Mr. and Mrs. Robert Lamb, we have a large collection of items started for this display. Both of these additions will help to make the American Maple Museum a more attractive place to our visitors.

We are always looking for new items for the museum. Any items that you would like to donate to the museum that are related to Maple, lumbering or logging would be appreciated.

Another change that the Board of Directors has made is that only two persons will be inducted into the Hall of Fame each year. These persons will be selected by most votes received at the museum by March 25, 1983. From past experience, it takes over 150 votes to be chosen, so I would encourage anyone who has someone in mind for the Hall of Fame to get their State and National maple organizations to back

their choice.

The Directors of the American Maple Museum are proud of the progress being made and hope to continue to make improvements in the future. We hope every maple producer will mark the 14th down and be with us on this year's opening of the American Maple Museum in Croghan, N. Y.

1983 NEW YORK STATE MAPLE QUEEN CONTEST

The selection of the 1983 New York State Maple Queen will be held at the American Maple Museum, Main Street, Croghan, New York, May 14, 1983, as part of its opening ceremony.

To be eligible contestants:

1. Must be between the ages of 16 and 21.
2. Must be a girl of a maple producing family, or of an employee of a maple producing family, or, a maple producer indicates applicant has spent at least twenty hours of service in his sugarbush.
3. Give a 3 to 5 minute presentation (oral or written), topic of her own choosing, relating to maple syrup production.

Judging will include appearance, poise, presentation, and knowledge of Maple Syrup Production.

It is hoped each District or Association will sponsor at least one or two candidates.

Applications may be obtained from Mr. Richard Ames, Canton, N. Y. 13617. Phone: 315-386-2015. Please apply by March 15, 1983.

Martha B. Campovy

NOTICE ADVERTISERS

Please notice new advertising rates on page 4. These will take effect in July 1983 issue.

WISCONSIN FALL MAPLE TOUR

by Gretchen Grape

On October 2nd, the Wisconsin Fall Maple Tour was held in Pierce and Dunn Counties. It was hosted by District Four and Bernard Drewiske, county agent.

After a registration period with coffee and donuts, a few introductions and the plans for the day announced, about 90 maple syrup makers boarded two buses and were off. The trees were at their peak in color, but the sun just could not make it through all the clouds we had that day, so their beautiful colors just did not shine! In spite of the clouds and the periodic downpours (we are a hearty bunch) we were able to enjoy ourselves.

The first stop was at Scott and Sue Wood's Sugar Bush in rural Spring Valley. This operation had a few unusual features to it. They have a 48,000 gallon below ground sap storage. What makes this different, is that it really is their swimming pool! Also, they have the only sawdust gasification burner used in the maple industry, that we know about. To top this off, Scott had it fired up for us when we got there! (Of course, it not being spring, Scott had to settle for using water.) It burns green sawdust and is very economical to operate. They tap between 12,000 and 15,000 trees and use vacuum tubing.

Then we went into Spring Valley to the Senior Citizens building, at which time we enjoyed a delicious lunch.

Again, it was time to board our buses and we were driven out to Connell's Sunridge Orchards, East of Spring Valley. We were told all about their orchard by the owner.

The second sugar bush we enjoyed seeing was that of Walter and John Smith, West of Eau Galle. They tap about 3,500 trees (500 on tubing and 3,000 using plastic pails with covers). A wood fired 6'x20' evaporator is used, complete with hood and preheater. A 2'x4' gas fired pan is used to finish the syrup. They have a room beside the evaporator which they use for bottling and sales. Here they had a very neat display of their maple syrup and honey products. Not only did we learn about their maple syrup operation, we were also shown their bee keeping operation. They have 700–800 colonies. (As you can see, bee keeping is their main business.)

Our last sugar bush was down in a beautiful valley in rural Ellsworth. Oh, if the sun would only have been shining on all of those beautiful maple trees!!! You have to drive ¾ of a mile *down* from the road to get to the sugar bush of Marvin, Melvern and Eugene Janisch. They tap 2,500–4,000 trees, all hand gathered into many dumping stations, which are gravity fed to four cisterns that hold 14,000 gallons. They operate a 6'x20' wood fired evaporator. Their supply of fire wood is endless, due to a windstorm that hit their area in July of 1980. This storm was also the reason that made it

impossible for them to tap in 1981.

We were all taken back to town to return to our cars and head out to the Spring Valley Country Club for our banquet. During a short program, our president Stanley Lacrosse honored four of our area maple syrup producers for their hard work and dedication. A short story about them was also read. They are Elwood and Kenneth Eaton and Vince and Orrin Wood.

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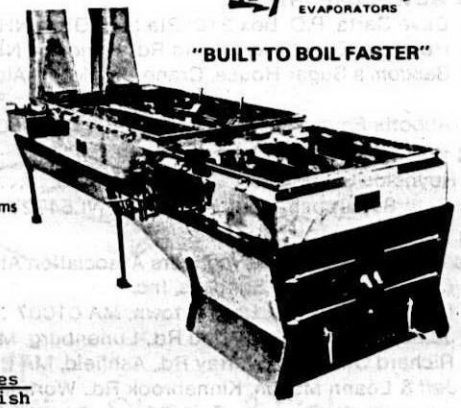

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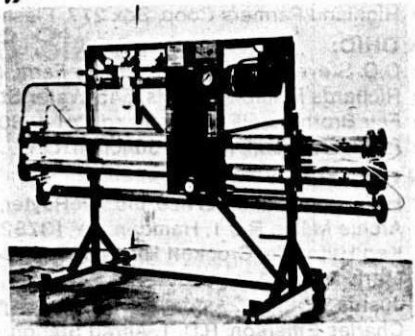

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ARCHIE'S SUGARBUSH

Dear Mr. Editor,

My wife, she says, "Truthful Archie, sometimes she call me honest Archie, please tell that nice Mr. Editor man about the squirrel at the sugar house."

Well, ya see, it was like this: About 2 feet off the edge of the sugar house was a 10 inch ash tree. About 20 feet away was the big walnut with a hole in a branch which was home for the squirrel. The squirrel would jump from the sugar house to the ash, then to the walnut and was safe.

The ash tree died — ash decline I think — so I cut it down.

Now that squirrel, out of habit, would race along the sugar house roof, up the ash to the walnut. The day after I cut the ash down, the squirrel followed habit. He raced along the roof, up in the air and was 20 feet up before he realized the ash was gone. But his momentum carried him to the walnut anyway.

This is the truth because if I wanted to exaggerate, I would have had the squirrel go 30 feet in the air.

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Harold Tyler, Maple Farms, Tyler Rd., Westord, NY 13488.... (607) 638-9474
Ralph VanBrocklin, RFD No. 2, Canton, NY 13617 ..... (315) 386-3036
Neil C. Wright, 28 Liberty St., Camden, NY 13316..... (315) 245-1519
(315) 245-1434
Northeastern Pennsylvania Maple Producers Association (717) 689-2353
Court House, Honesdale, PA 18431..... (717) 253-5970
Potter-Tioga Maple Prod., Assn., Coudersport, PA 16915..... (814) 274-8540
Robert McConnell, Coudersport, PA 16915 ..... (814) 274-9143
H.W. Russell & Sons Maple Farms, Rome, PA 18837 ..... (717) 247-7361
Somerset County Maple Producers Association
% Dale Jeffrey, Box 15, Wagners Rd., W. Salisbury PA 15565.... (814) 662-2904
Sugar Bush Supplies, 2611 Okemos Rd., Mason, MI 48854..... (517) 349-5185
Kinny & Hodgkins Maple Supplies, Thorndike, ME 04986 .... (207) 568-3683
Kinny & Hodgkins Maple Supplies, Yarmouth, ME 04096..... (207) 846-4570
Maine Maple Products, Inc.,
Titcomb Hill, Farmington, ME 04938 ..... (207) 778-3803
Wyman W. Manes & Son, East Orwell, OH 44034 ..... (216) 583-2388
Richards Maple Products, 545 Water St., Chardon, OH 44024 (216) 286-4160
O. C. Stevens & Son, Maple Lane Farm, Mt. Gilead, OH 43338 (419) 946-3300
Reynold's Sugar Bush, Inc., Aniwa, WI 54408 ..... (715) 449-2057
Ivan Puffenbarger, Rt. 637, Blue Grass, VA 24413..... (703) 474-2771
Bacon Jugs Canada, Box 152, St. Andrews East, Que, J0V 1X0... (514) 562-2237