National Maple Syrup • DIGEST •



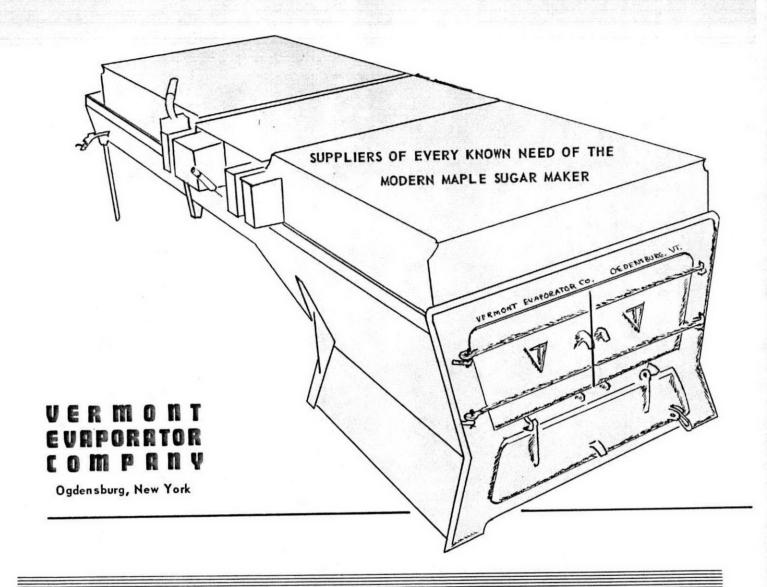


Vol. I, No. 4

BAINBRIDGE, NEW YORK

NOVEMBER 1962

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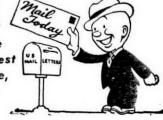
THE "DIGEST" MUST BE WORTH SOMETHING!!!!

In the last issue, we asked each producer to contribute a dollar or two, or whatever you think it's worth, to help pay the cost of publishing the "Digest." Many contributions have been received.

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Published byMain's Minit Mail
Edited byLloyd Sipple



The other day I heard about a man who had been supporting two wives for several years. He certainly wasn't a maple producer because I've never seen one who could afford such a luxury.

Why not? Well, for one thing, the price of syrup is too low. Sugar

makers keep telling me they don't get enough for their drum syrup. Sure, I agree the price isn't what it ought to be, but with the competition of Canadian syrup, there isn't much the individual producer can do about it.

But he can control his retail price. A lot of producers are practically giving away their syrup at \$5.00 a gallon or even less when syrup sold for \$5.00 back in 1947. Now I'd just like to know what you can buy today for the same price you bought it for 15 years ago.

A customer recently complained about the price I charged for syrup. He said he bought syrup for years from a competitor who never once raised his prices—right up until the time he went bankrupt. I guess there's more truth than poetry to that statement.

Most producers don't realize how

much more it costs them to sell syrup retail than bulk. If you've never figured it out, you better sit down some evening this winter and do it. And you better have a good sharp pencil because I think you'll find out you aren't coming out much better than if you sold it all in the drum at current bulk prices.

However, there's one consolation to being a maple producer. You'll never have to worry too much about income taxes. By now, those who know me are probably wondering why I stay in the business when I know there isn't any money in it. There is plenty of money in maple. I know, because I put it there! I guess it all boils down to this one fact: If you like long hours of hard work at low pay, you sure can have one "hell" of a time in the maple business!

The Editor

Drops in the Bucket

Maybe fewer drops in the bucket will be needed to make a gallon of syrup if William Gabriel, Geneticist of the Northeastern Forest Experiment Station, working at the University of Vermont, Burlington, has any luck. Bill has been traveling the Northeast attempting to study what, where, and when the maples are the sweetest.

As a first step to improvement of sugar trees, the following are preliminary standards for a "sweet tree:"

- It must run at least 5% sugar sap.
- The sugar content must be at least 50% greater than the average of the total stand or bush.

Bill has made contacts in many states of the northeast and is getting ready for the coming season. Those of you who have a "Sweet Sue" in your bush should contact him at Burlington, Vermont. It takes 86 gallons of 1% sap for a gallon of syrup - 17 if the sap is 5%.

Maple is a prolific seeder-as wit-

ness the colorful carpet of seedlings in any ungrazed woodlot. Yet which of these millions is the one that hits 5% or even 7% sugar? Probably the one the cow or the deer prefers and browses to death. Multiplying these sweet trees is tricky, much work in the past has been done at the University of New Hampshire; work is going on at present by many others, notably at the Northeastern Forest Experiment Station. A seed orchard of such trees may well be a fact in a few years.

Now is the time to market maple syrup, maple sugar, maple cream or fluff. But how many producers have any left to market? I have talked to several—the story is the same—"I sold more bulk than I should have... all I have now is 25 gallons." "I'm all sold out, I wish I had more." The story is much the same over the maple area: Make it, sell it quickly, forget it—this is poor business for with the cooler and cold weather comes the best time to sell—hunters'

(Continued on page 10)

SEND YOUR CONTRIBUTION NOW!!!

to

THE MAPLE SYRUP DIGEST
Bainbridge, N. Y.



Geauga County Tours

Two summer sugar bush tours were held the evenings of August 20 and 21. 1962, in Geauga County. All of these tours started at 7:00 p.m., D.S.T. On August 20 the first stop was at the Warble Farm (Fred Lindow) on Pettibone Road just east of Route 306 in Bainbridge township. Fred does an outstanding job of producing high quality maple syrup, and Fred and his family have built up an excellent trade in maple syrup and maple products. built aplastic hood over the evaporator and says that it practically eliminates steam in the sugar house. A log cabin has been erected near the road for maple syrup sales and maple products manufactured at the Lindow sugar amp. The combination of suga, house and sales room makes a pleasant stop for the retail customer, and a fine place to promote the sale of quality maple products.

The second stop that evening was at the Howard Taylor Farm on Haskins Road, just south of Bainbridge-Auburn Road. Howard and Bill Taylor have developed a central evaporating plant for maple syrup produc-

The AYRES HYDROTHERM The only single tool available which reads 36BE 66BR the table grade weightof maple syrup. While you draw off, the weight While going changes. filters, it through changes. While heating to can, weight changes. The Tip-of-the Red shows how much. Price: \$6.50 Add 50¢ if ordered by mail. Order from your equipment house:

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tion. This addition was built onto their sugar house last year. Maple sap flows continuously through their original evaporator into the oil-fired evaporator pans of the new plant and from there into the finishing pan. The finishing pan is operated by a steam generator.

Howard demonstrated the ease of processing maple syrup in the finishing pan. The maple producers were startled when the syrup began to boil in a matter of a few seconds, after the steam valve had been opened. This demonstration vividly illustrated the ease of reprocessing and packaging maple syrup for orders throughout the year. Howard said that if he was given two hours notice that he could be ready to reprocess bulk syrup and package the order.

Maple sap was purchased from sugar bush operators last season. This operation will be expanded this coming year. Last year maple syrup was produced from 8,000 tapholes. Howard hopes to reach his present capacity of 12,000 tapholes in 1963. Producers may want to discuss this arrangement with Howard in the near future. A 1000 gallon tank truck is used to transport maple sap over greater distances.

There were many more aspects of the maple products business to see at all of these sugar bush operations; but if you weren't on the tour, we would suggest that you stop and see these producers.

The twilight sugar bush tour on Tuesday evening to the Ralph and Jeannette Grosvenor sugar bush and the Bob Fenwick sugar bush in Claridon township emphasized the management of young maple stands and woodland improvement. Both of these sugar bush operations are outstanding examples of good sugar bush management.

The Grosvenor sugar bush is an excellent example of thinning young maple stands to increase the growth and renewal of sugar maples. Ralph.

has helped these young maples to practically double their growth rate as a direct result of proper thinning in the sugar bush. The renewal of old sugar bush stands with replacements is of paramount importance to the maple producer.

It is possible to receive up to 75% of the cost of woodland improvement through the County ASC B-10 practice. Farmers should contact the ASC Office in Burton for further information on this program. We would suggest that you contact them after September 1 and ask about this important practice.

Bill Cowen, Extension Forestry Specialist at Columbus, and Bob Fenwick explained some of the factors involved in selectively harvesting trees and managing the sugar bush. Bob has really improved the woodlot on his farm by selectively cutting trees that are matured, diseased, or were of poor quality.

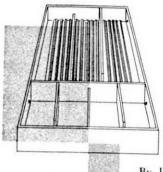
Elm trees are being removed from the woodlot because the Dutch Elm disease has limited their value. Beech trees are being removed because of their soft centers and the consequent early development of hollow stems.

Ture Johnson, Farm Forester at Burton, Ohio, can help woodlot owners with many of these woodlot management problems and is a well trained specialist in this field. Ture also is involved in supervising the B-10 woodlot practices under the ASC program.

Ralph Grosvenor and his daughter, Mrs. Charles Kellogg, furnished the group with doughnuts, cookies, and coffee at the forestry meeting in the Grosvenor barn after the tour. We are indeed grateful to the Grosvenor's for their fine hospitality.

I would suggest that you talk with some of the people involved in this woodland improvement program to more fully appreciate the importance of forestry and sugar bush management.

> Leland Schuler Extension Agent Burton, Ohio



SCALE IN MAPLE-SIRUP **EVAPORATORS**

· · · how to remove it

By J. C. UNDERWOOD and C. O. WILLITS, Eastern Utilization Research and Development Division, Agricultural Research Service

When maple sap is concentrated to sirup in a flue-type open-pan evaporator, the organic salts become supersaturated; that is, they are concentrated to a point where they can no longer be held in solution. They are then deposited on the sides and bottom of the evaporator as a precipitate, or scale. This scale forms a hard, impervious layer that builds up with continued use of the evaporator. By reducing heat-transfer efficiency, the scale causes waste of fuel and an undue holdup of sirup in the evapo-

The scale is of two types. One type is a proteinlike material that forms in the flue or sap pans. The other, called sugar-sand scale, forms in the sirup or finishing pan. It is a calcium and magnesium salt deposit, similar to milkstone and boiler scale.

Sugar-sand scale is the more troublesome of the two types. It is especially troublesome if it is allowed to build up to an appreciable thickness. Also, sugar sand contains entrapped caramelized sugar, which contributes to the production of dark-colored

Removing sugar-sand scale is not easy, and doing it by physical means (scraping, scrubbing with steel brushes, or chiseling) is almost impossible. Removal becomes more difficult as the layer of scale becomes thicker.

METHODS USED IN THE PAST

Some methods producers have used in the past to prevent the formation of scale and to remove thin layers include:

(1) Pouring skim milk into the pan and letting it remain until it sours; the lactic acid of the sour milk has some solvent action on the scale.

(2) Running soft spring water through the evaporator for a long period; this tends to dissolve small amounts of scale.

(3) Reversing the flow of sap through the evaporator, according to

the manufacturer's directions; this retards the formation of scale.

Equipment manufacturers have used muriatic acid to remove heavy incrustations of sugar-sand scale from evaporators returned to them by maple-sirup producers. This acid is highly corrosive and must be used with great care to avoid damaging the pans by dissolving away the thin tin-plate coating. Also, unless a person is experienced in the use of muriatic acid, there is danger that he will get the acid on other materials or on the skin.

CHEMICAL CLEANERS

Laboratory and field tests have shown that sulfamic acid, one of the chemicals developed for cleaning milk-processing equipment and marine boilers, can be used to remove sugar sand from most maple-sirup equipment. Sulfamic acid (the half amide of sulfuric acid) is an odorless, white, crystalline solid that is highly soluble in water. It must not be confused with sulfuric acid. Sulfamic-acid crystals can be handled easily, with little risk of spilling and little danger from volatile fumes. As a solid, sulfamic acid is reasonably harmless to the skin and clothing. However, a solution of the acid can cause skin irritation. If either the dry acid or its solution comes into contact with the skin, it should be washed off immediately with large quantities of water. Also, it should be removed from clothing and equipment by rinsing repeatedly with large quantities of water. Bulk supplies should be stored in a tight container in a dry place.

Despite its strong acid characteristics, sulfamic acid has only a slight corrosive action on most metals except zinc plating, especially if contact is of short duration. For example, on tin (the metal coating of most evaporators), hydrochloric acid is almost 25 times and sulfuric acid is approx-

imately 80 times more corrosive than sulfamic acid. Furthermore, some manufacturers of sulfamic-acid cleaners add so-called inhibitors to the acid, which lessen its corrosive action and thus greatly reduce its attack on iron and steel. Usually sulfamic acid with inhibitors costs considerably more than the pure chemical. Whether or not purchase of the higher priced acid containing inhibitors is justified depends on the use to be made of the cleaner. Because of its corrosive action on zinc plating, sulfamic acid is not recommended for cleaning galvanized iron.

Gluconic acid, another chemical cleaner, is recommended for cleaning galvanized-iron equipment because it has much less corrosive action on the zinc coating. However, use of gluconic acid need not be limited to cleaning galvanized equipment; it is effective on most metals, even though it has a slower cleaning action than sulfamic acid. It is usually sold as a 50-percent water

solution.

Both sulfamic acid and gluconic acid can be obtained from suppliers of maple-sirup equipment.

USE THESE AMOUNTS OF ACID

Sulfamic Acid

For a thin scale—Use 1/4 pound (½ cup) per gallon of water. This is a 3-percent solution.

For a heavy deposit—Use 1/2 pound (1 cup) per gallon of water. This is a 6-percent solution.

Gluconic Acid

For all deposits—Use 1 gallon of 50-percent stock solution (obtained from your supplier) to each 4 gallons of water. This is a 10-percent solution.

To avoid damaging the tinned surface of the evaporator, do not use a stronger solution than recommended; and do not leave the solution in the evaporator longer than is required to soften the scale.

CLEANING PROCEDURE

Use the same methods to clean the flue (sap) pans and the sirup

(finishing) pan.

You will need a good supply of piped water, so that you can use a hose to rinse the pans. If water is not available at the evaporator house, take the evaporator pans to a source of piped water.

You should wear rubberized gloves to protect your hands from the acid solution. (Continued on page 9)

Report of National Count

After three years of floundering around, the National Maple Syrup Council is finally getting out of low gear and accomplishing some of the things for which it was organized.

Believe me, I am not belittling the work the former officers and directors have done. After all, I am one of them, and I am not in the habit of criticizing my own accomplishments. It seemed to me as though it took too long to get going, but I guess this kind of organization always does.

At the Third Annual meeting held in Philadelphia this last October 22nd, the Council seemed stronger Eight states now bethan ever. long to the Council. They are Vermont, Massachusetts, New York, Ohio, Wisconsin, Pennsylvania, Michigan and New Hampshire. The last two listed, joined this year, and all eight states represent 95% of the maple production of the United States.

At this meeting the following business was transacted:

An amendment to the constitution of the Council was approved. This amendment was worded as follows:

ARTICLE III, MEMBERSHIP

The membership of the Council shall consist of all maple syrup producing states which have paid their dues and have been accepted as members by the Council. Each state will be represented

on the board of directors of the Council by one delegate and one alternate delegate, both delegates must be primary maple syrup producers, elected by the maple producers' association of that state (or a group which represents the maple producers in that state.) The National Council will not be responsible for the expenses of any state delegate. Each state will be allowed but one vote on all business of the Council.

Associate members of the Council need not be maple syrup producers, and are appointed by the Council. These members will not vote.

A problem is confronting the maple industry in the states resulting from the low tariff, low production costs, and increasing importation of Canadian syrup, and the devaluation of the Canadian Dollar. To instigate action on this problem, the Council passed the following resolution:

"Whereas, the present United States duty on Canadian maple products does not reflect the lower cost of maple production in Canada.

Since it now represents less than 5% of the value of the product, and since this is now obviated by the 7½% difference between United States and Canadian currency, be it resolved that the National Maple Syrup Council take appropriate steps to afford the domestic maple producer a measure of protection from this unfair Canadian competition by working toward the enactment of an adequate ad valorem duty or by restriction of Canadian maple importations by imposition of a quota system."

Eric Nye, Vermont and Linwood Lesure, Massachusetts were appointed to process this resolution.

John Zimmerman, Stoystown, Pennsylvania, gave a report on the maple disease, what progress has been made, and the need for appropriations for additional research. recognition of the importance of continuing this research, the Council drew up and adopted the following resolution:

"The National Maple Syrup Council meeting in executive session October 22, 1962, at Philadelphia, Pennsylvania, representing eight Maple Syrup producing states from New Hampshire to Wisconsin, recognizing the damaging conditions affecting the Sugar Maple trees throughout the whole Maple range and the serious threat to the production of Maple Syrup, Maple timber and shade trees, hereby call to the attention of United States Forestry Research Advisory Committee and the Directors of the Agricultural Experiment Stations of the Land Grant Colleges and Universities, the need for early concerted action to investigate the causes and the possible controls, if any, of these damaging conditions:

Hereby resolves that action be taken by the appropriate organization to set aside monies as provided by the Mc-Intyre Bill for the investigation and the coordination of Pathology, Entomology and Soils along with other related fields, to solve the problems."

The Council has already taken action to place this resolution in the hands of the proper agencies.

Many other topics were discussed but no action was taken on them. Some matters were skipped over entirely, mostly because we ran out of time. We thought that since the Council meeting was held in conjunction with the Fifth Triennial Maple Conference on October 23 and 24, and a number of topics were to be discussed at this conference, one day would be sufficient.

After three sessions on the 22nd, morning, afternoon and evening, and one on the 24th following the conference, we still didn't have time to take care of everything. With this in mind, I think all the delegates feel the National Maple Syrup Council has plenty to do and will play an important part in the maple industry.

As for the fifth Triennial Maple Conference, all I can say is "every one is better than the last." I guess that is because this maple business is getting so much more complicated than it used to be. Maybe it just seems that way because we're getting to know a little

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I and Maple Conference



This group attended the Fifth Triennial Maple Conference at the USDA Laboratory in Philadelphia

more about the why's and wherefore's that make it tick.

Reports were given on research and experiments by Research and Extension Foresters, Botanists, Chemists, maple producers and government officials. If I have missed a few, please forgive my memory. Every maple producing state and every phase of the industry was represented in one way or another.

N.E. Beabes, maple producer from Hooversville, Pennsylvania told how he doubled production on the same number of taps by tapping in November and using Paraformaldahyde pellets.

Dr. Jerome Pasto, Pennsylvania State University, gave a report on the financial cost and economics of setting up three different sized central evaporator plants and R.P. Mears told of his experience in setting up such a plant last year for General Foods Corp. in Evart Michigan.

Fred Winch, New York and Ted Peterson, Wisconsin told of the work the extension service has done in their respective states. Dr. Costilow, Michigan State University summarized the history of the Paraformaldahyde pellet.

Reports on experiments with tubing, sterilizing pellets, and other phases of producing sap were given by Dr. James Marvin, University of Vermont; Dr. A.R.C. Jones and Dr. G.A. Jones, McDonald College, Quebec, Canada.

The results of a project to find the factors affecting sugar sand

formation were given by Prof. Hacskaylo, Dept. of Forestry, Ohio Experiment Station, and two reports were given on projects being conducted at the Eastern Utilization Research Branch, U.S.D.A., Philadelphia, Pa. One, "The Concentration of Sap by Freezing," by Dr. E. E. Stinson; the other; probably the most complicated, never-ending research program anyone has ever dreamed of, entitled "The Microbiology of Maple Sap" by Dr. A. E. Wasserman. The results of experiments on Maple Tree Diseases was summarized by M.E. Fowler, Chief of Forest Disease Research Division, U.S. Forest Service, Upper Darby, Pa., and D.R. Houston, Pathologist, Forest Disease Laboratory New Haven, Conn.

All in all it was the most informative conference ever held under the direction of Dr. P.A. Wells and Dr. C.O. Willits with the assistance of everyone in the Philadelphia Laboratory who has anything at all to do with maple.

All of these reports will be disdiscussed at the winter maple schools and institutes. A complete record of proceedings will be published by the U.S.D.A. Laboratory and the various papers will be printed in the "Digest" as soon as we can get them condensed and released. I am not capable of doing this myself and an attempt would not justify the wonderful job each of these men have done in their specific field.

One hundred thirty-three registrations from Maine to Minnesota and Canada to West Virginia made this the largest group ever attending an International Maple Conference.

Lloyd H. Sipple

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Geauga County Survey

A survey was sent to all maple syrup producers after the 1962 maple season. Sixty-one surveys were completed and returned by the producers.

Fifty producers used the germicidal pellets in tapholes; eleven producers did not use the pellets in 1962. The majority of the fifty producers using the pellets left some tapholes as checks on the pellets performance.

A table has been prepared from

the survey data using maple producers estimates on the sap yield and returns attributable to the use of germicidal pellets. The reports varied all the way from little or no increase in sap yield to 50% or more return from using pellets. Of course, some sugar bushes were tapped early, and some quite late. Some producers already do an excellent job of aseptic tapping, and other producers are not quite as careful.

*RETURN FROM USE OF "PARA" PELLET IN 1962

Size of Operation in Buckets	Estimated Return in Gallons for Pellets	Gross Increase at \$5.00/Gal.	Cost of Para Pellets
500	25.8	\$ 129.25	\$ 5.00
1000	51.7	258.50	10.00
2000	103.4	517.00	20.00
3000	155.1	775.50	30.00
4000	206.8	1034.00	40.00

^{*}Based on estimate of 1962 maple syrup producers in Geauga County.

Some typical comments made by producers on the survey were as follows.

"I don't think that we had our trees tapped early and long enough this year to really find out how good the germicidal pellets were."

"The greatest advantage of pellets to us was the absence of bacterial growth in the taphole. This in itself was worth the money spent."

"Ten percent increase production due to use of pellets."

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Making High-Density, High-Flavored Maple Sirup. Willits, C.O., H.A. Frank, and J.C. Underwood, U.S. Dept. Agr. Circ. ARS 73-26 (December 1960)

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Methods of Analysis for Maple Sirup: USDA Color Comparator. Willits, C.O. and J.C. Underwood. J. Assoc. Offic. Agr. Chemists 44, 330 (1961)

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Judging Maple Products. Winch, Jr., F.E., J.C. Underwood, C.O. Willits and W.W. Simonds. Cornell Extension Bulletin 1065 (1961)

Maple Sirup. XVIII. Bacterial Growth in Maple Sap Collected with Plastic Tubing. Frank, H.A. and C.O. Willits Food Technol. 15, 374-8 (August 1961)

Next issue we will publish additional publications available.

Removing Sugar Sand Scale

(CONTINUED

The best maintenance practice is to remove the sugar-sand scale between each run. The following procedure should keep the evaporator clean and bright.

Swab the acid-cleaning solution on the pans with a cloth; allow it to remain a few minutes; then thoroughly rinse the pans with water, to be sure the acid is completely removed.

If a layer of scale has accumulated on the evaporator, use the following procedure:

1. Remove all loose scale and dirt from the pan with a broom or brush. Then rinse the pan with a good stream of water from a hose.

2. Plug the outlets of the pan. If the outlets have threaded fittings, use metal screw plugs; otherwise, use wooden, cork, or rubber stoppers.

3. Fill the pan with water to the level to be descaled. Measure the water as you put it in the pan, and make a record of the number of gallons for future use. Also, make a

record of the estimated volume of the pan.

4. Add the correct amount of acid to the water in the pan. Stir to help dissolve the acid.

5. Warm the solution in the pan to a temperature of 140° to 160°F. This hastens the rate at which it softens of dissolves the scale. After the warm solution has been in the pan for a short time—usually 15 to 20 minutes is enough—brush the sides and bottom of the evaporator with a fiber brush to speed up removal of the deposited sand.

6. When the evaporator is clean, drain the acid from the pan. Turn the pan on its side and flush it out with a stream of water. Repeat the water rinse 5 or 6 times, and allow the pan to drain between each flushing. Thorough rinsing is necessary to insure complete removal of the acid and its salts from the pan.

To remove a thin layer of scale with sulfamic acid requires a total of 30 to 35 minutes; to remove a thick layer requires from 60 to 90

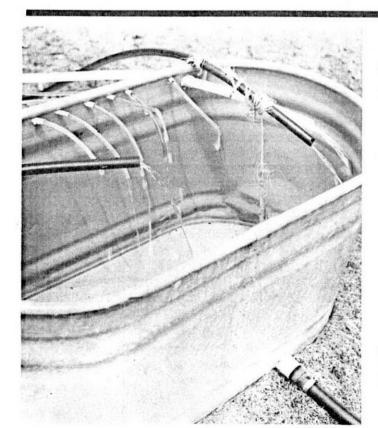
minutes. With gluconic acid, about twice as much time is required.

You can store the acid solution and re-use it a number of times. Do not store it in iron or galvanized containers; glass or earthenware containers are best.

To economize on the amount of acid, use a smaller quantity of solution and tilt the pan first in one position and then in another until all the scale-covered surfaces have been soaked.

Sulfamic acid and its salts are toxic to growing plants. For this reason, it makes an effective weed-killer. However, care should be taken not to discard the used acid solution where desirable plants may be damaged or killed.

Further information on maplesyrup production is given in Agriculture Handbook 134, Maple Syrup Producers Handbook. Copies are available on request from the United States Department of Agriculture, Washington 25, D.C.



Results like this make us proud to be part of the most important development in Maple history.

Thanks for reporting the results you received this season.

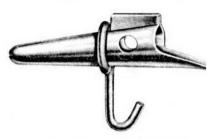
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DROPS IN THE BUCKET

(Continued)

breakfasts; Christmas gifts, winter meals are "naturals" for marketing this northern sweet.

They're sweeping the country!! But the true maple syrup is but a drop in the bucket! "They" are pancake restaurants! "All you can eat for \$1.50." "37 different kinds of pancakes." "They" started in California. "They" are in every metropolitan area now. "They" use apple syrup, loganberry syrup, orange syrup and maple blends. "They" are good, "they" may help you sell maple if you get out and sell maple to them.

And speaking of selling, Vermont sells syrup! Every roadside stand, every motel, every gas station, every souvenir or gift shop sells syrup and maple products. Maple is there to pick up and take with you. This is the essence of salesmanshiphave the product where the public can get it. From this point you may go where you see fit but it must be available 366 days a year, especially in leap year. There is no reason why other regions cannot come close to this. Other ideas to promote can be found in maple festivals in Geauga County, Ohio; Elizabethtown, New York; Aniwa, Wisconsin and It's a challenge for the producer to make maple a larger part of his year's income.

Attention

ALL MAPLE SUGAR MAKERS

Read the National Maple Syrup Council report in this issue and you will see what this organization is doing for you.

There is much more they could do if they had your support.

Join your local maple producers association and be a part of the National Council.

CLASSIFIED

FOR SALE: Pure Maple Syrup, Gallon Half Gallon and Quart. Small or large orders. WM. C. CAMPBELL & SONS North Java, N.Y., Phone Java GL 7-9489.

EVAPORATORS—New and Used, Lamb Tubing—Orlon Filters—Name Stickers— Cans—Tappers—Sap and Syrup Pumps— Cartons—Grade Kits—Everything for the Maple Producer, large or small. LESURE FARM, Ashfield, Mass.

Great-Uncle Jeremiah plowed with oxen, used tallow candles, cut grain with a cradle, and cooked sap with a wood fire. Great-Uncle Jeremiah had to; he had nothing any better. Are you living in Great-Uncle Jeremiah's time??? Convert to oil—it is modern, clean, safe, and economical. Write to LES JONES, Holcombe, Wisconsin (12 years experience in oil firing)

FOR SALE: Used Equipment traded on new Lightnings—3'x10' set of Leader Pans, \$70.00; 4'x10' set of Grimm Pans, \$150.00; 5'x12' Leader, complete, good condition, \$495.00. NEW Lightning Equipment sold anywhere. Write for prices and literature. READ C. ADAMS Greene, N. Y.

THIS SPACE SHOULD HAVE BEEN SOLD FOR ADVERTISING—It would cost \$15.00 and would be read by 9,000 Maple Producers.

THE VERMONT SUGAR MAKERS ASSOCIATION

Is Supporting

THE NATIONAL MAPLE SYRUP COUNCIL

and

"THE MAPLE SYRUP DIGEST"

Every maple producer in Vermont should be a member of his local association and give his support to these organizations.

Sponsored by

The Vermont Sugar Makers Association

Progressive Movies for Meetings

Taken in the field from the operations of practical successful men. Good movies to watch and think about and to help you.

These movies while taken with the interest of furthering the better application and sales of Maple Tubing and Maple Tap hole Pellets and our new Electric Maple Tree Tapper are very general and entertaining.

Maple knows no boundries whether the picture be of Wisconsin or New Hampshire, the maple trees don't know it, and all produce the same maple sap, 'and I ain't telling them any different'.

These movies bring the latest methods to you of the entire operation of Maple and bring Maple People closer together as an industry and create a friendlier more cooperative understanding from all areas.

The new 1962 films run about 30 minutes each and are 16 MM color 24 frames. As yet sound has not been added. These films cover general Maple of up to date practices.

One new Film is a perfectionist film showing the best and the latest of everything that is maple, covering

the complete tubing installation from tapping through washing and storage. The sap then is hauled in vacuum tank trucks and all evaporation is done in multiple covered evapoators.

Then the film goes into the complete making of Maple Sugar and Candy including the coating of the candy and how to keep it fresh, almost indefinitely.

The other film is a general progressive Maple story covering the entire area from New Hampshire to Wisconsin. This other 1962 film covers progressive outfits and their methods, including the world's largest setup in Wisconsin.

There also is a 40 minute 1961 general Maple Film, a 15 minute 1961 tubing method teaching film. These are 16 MM color — 16 frames and are still available to areas that haven't seen them.

As mentioned films are general educational entertainment thinking material.

These films are available, free, to Maple meetings for the asking. We have no time for any program but to help Maple.

Also whenever it is possible I am glad to come to the meeting and show the films at no charge. Meetings, when they start, come thick and heavy and I often cannot get around to all of them, but I am willing to try.

These films are strictly on the job, unrehearsed stories I take as I travel through the Maple Orchards and Sugar Houses across the entire Maple belt.

Well I better get going. It's the time of year that wood smoke hangs heavy over the hills, on a frosty morning, telling a feller's nose that snow ain't fur off and he better get cutting more wood.

Course I'm one of those guys that don't believe in leaving a widow with a desirable wood pile, neither!

Over on the east branch of the Salmon we found an old spruce stub with enough dry kindlin' in it for all winter.

Then I gotta scare the hell out of a couple deer 'fore snow shoe time.

Bob Lamb



THE LAMB ELECTRIC TREE TAPPER

A YEAR AROUND HEAVY DUTY 6LB., 1/2" IRON DRILLING UNIT-750 R. P. M.

This unit not only taps trees the best and easiest way yet, but provides you with a selfpowered year around heavy duty drilling unit. It is a complete maple tree tapping unit, the best, but its year around utility use will greatly exceed its tapping value.

The 12 volt 22 lb.-30 amp. battery will tap over 1000 % taps 2" deep without recharging. We also have available 31 lb.-38 amp. 12V battery.

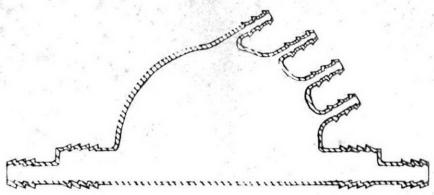
This larger battery would only be desirable for some large operators that tap up to $3^{1/2}$ " deep. Either size battery mentioned fits in the same carrying case.

The specially developed pack board and battery carrying case allows the operator to easily carry this small 12 volt spill-proof aircraft battery that has plenty of power.

For all prices and complete accessories, write:

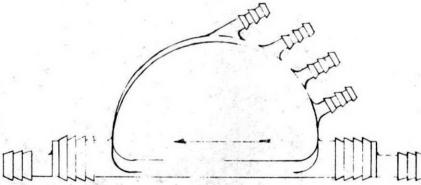
A. C. LAMB & SONS · Liverpool, N. Y.

LAMB presents



Our 1963 Contribution to MAPLE.

Our new tubing booklet is FREE. Send for it now!



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