



MAPLE SYRUP

DIGEST



Vol. 20, No. 1

February 1980

BULK RATE
U. S. POSTAGE PAID
BAINBRIDGE, N. Y.
PERMIT NO. 12

Address
Correction
Requested

LIGHTNING RAISED FLUE EVAPORATOR

Manufactured Exclusively in America by:

G. H. GRIMM COMPANY, Inc.

Rutland, Vermont 05701

Phone Area Code 802 775-5411 or 773-9519

Since 85% of the boiling is done in the flue pan
Why not have the longest flue pan available

"Lightning Raised Flues" boil faster
since they go all the way across to
the sides of the pan.
(No flat surface necessary for
brick clearance in arch)

"Lightning Raised Flues"
can not be struck by wood
when firing; since they are
"raised" out of the way

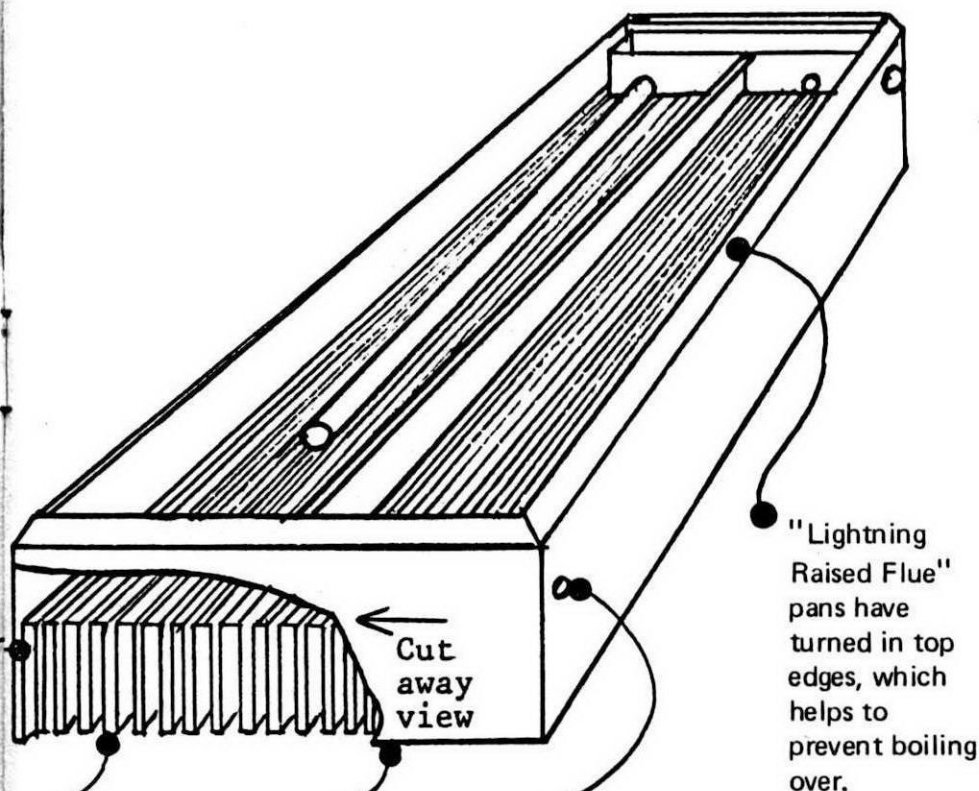
The arch for the "Lightning Raised Flue" and syrup pan has baffles to

Compare the square footage in our flue pans

Example:	3' x 10'	"Lightning Raised Flue"
	4' x 12'	"Lightning Raised Flue"
	5' x 14'	"Lightning Raised Flue"

On Special orders, we can make Longer Flue Pans:

Example: 9' Long Flue Pan for a 12' long Evaporator



"Lightning Raised Flue" pans have turned in top edges, which helps to prevent boiling over.

"Lightning Raised Flues" are enclosed on the ends, providing a "live" wall of sap, eliminating burning the tips of the flues off.

"Lightning Raised Flue" pans have a higher level of sap than their syrup pan, making possible a positive gravity feed into their syrup pan, which simplifies controlling the depth of the syrup pan, minimizing the chance of burning.

direct and HOLD THE HEAT up in the flues for MAXIMUM efficiency.

- evaporator has a 7' long Flue Pan (standard)
- evaporator has a 8' long Flue Pan (standard)
- evaporator has a 10' long Flue Pan (standard)

NATIONAL MAPLE SYRUP DIGEST

Printed by York Mail-Print
Unadilla, N. Y.

Edited by Lloyd Sipple
Bainbridge, N. Y. 607-967-8331

DIRECTORY OF OFFICERS

Ronald Shaw Chairman
Hawkestone, Ont. LOL1TO

705-325-6878

Russell Davenport . . . Vice-Chairman
Shelburne Falls, MA. 01370

413-625-2866

Gordon Gowen . . . Secretary-Treasurer
Alstead, N. H. 03602 603-835-6531

DIRECTORS

Michael Girard . . . 203-658-5083
Simsbury, CT 06070

Orlando Small . . . 207-778-2404
Farmington, ME 04938

John Kroll . . . 612-732-2575
Long Prairie, MN 56347

Terry Healey . . . 616-582-7683
Charlevoix, MI 49720

Kenneth Bascom . . . 603-835-2230
Alstead, N. H. 03602

Gordon Brookman . . . 716-988-3617
South Dayton, N. Y. 14138

Ture Johnson . . . 216-834-4206
Burton, OH 44021

Edward Curtis . . . 717-253-3759
Honesdale, PA 18431

Wilson "Bill" Clark . . . 802-325-3203
Wells, VT 05774

Adin Reynolds . . . 715-449-2057
Aniwa, WI 54408

NATIONAL MAPLE SYRUP DIGEST

Published by: Lloyd H. Sipple
R D # 2
Bainbridge, N. Y.

Published four times a year.
(Feb, July, Oct, Dec.)

Postage

Paid at Bainbridge, N. Y. 13733

Mailed outside our circulation
area for \$3.00 per Year.



Printed by:
YORK MAIL-PRINT, INC.
Mill & Watson Sts. Box 489
Unadilla, New York 13849

COVER PICTURE

Entire new cover was designed by Susan Duncan, Bainbridge, N. Y. She is currently an art major at Marywood College, Scranton, PA.

DIGEST ADVERTISING RATES

2 Page Spread. . . \$280.00

Full Page 150.00

½ Page Vert. or Hor . 85.00

Column Inch 12.00

Classified40 per word

Deadline for copy -

First of month preceding
Issue

FILTER BAG LINER

SAVES TIME

INCREASES LIFE OF BAGS



No need to remove filter bag from syrup filtering tank. Just remove liner from bag, rinse out solids in hot or cold water and replace. Liner has long life with careful use.

KOPEL FILTER PAPER COMPANY

2538 S. Damen Avenue, Chicago, Ill. 60608

Serving the Maple Syrup Industry

more than 25 years

Editorial

We finally did it. We ended up in the black last year. This is the first time in several years that the Digest hasn't had a deficit. It didn't amount to much of a profit but it gives us a little more operating capital.

The reason I say "we" is because you all helped. The combination of increased advertising, higher subscription rates from most associations and more and bigger contributions from all of you turned the tide.

However, a new year is starting, in fact a new decade (I think). We certainly can't be complacent so let's start it off right. The return envelope is included in this issue and I hope each and every one of you will use it. It just isn't right if everyone doesn't pay his own way.

So please, use the envelope now to either send in your contribution or ask to have your name removed from our list. The suggested rate is \$2.00 a year or 3 years for \$5.00. Please make your check payable to the Maple Syrup Digest because that's what my stamp says.

Maybe you've noticed already that we have a new name. We dropped the National because so many issues go to Canada. It's now simply called the "Maple Syrup Digest". That's what everyone always called it anyway.

Also, an important article in this issue is the new U. S. Standards for grading maple syrup. After almost 20 years the efforts of the North American Maple Syrup Council, work started by Dr. C. O. Willits of the U.S.D.A. Laboratory in Philadelphia and one of the primary reasons the Council was formed, a uniform, workable grading law

has been approved and will go into effect January 14, 1980. It's been a long, uphill pull for a few dedicated maple folks but it's finally a reality.

I'd like to take this opportunity to thank "Will" for insisting that we take this course.

LATE BUT IMPORTANT —

At the January, 1980, joint meeting of the New York State Maple Producers Assoc. and the Farm Bureau Maple Marketing Co-op. the following suggested prices were approved:

Farm Bureau bulk syrup suggested minimum per pound, Grade AA-\$1.00, A - \$.90, B - \$.80, C - \$.70. The Association suggested retail prices for syrup at the sugarhouse; Grade A, Gallon - \$20.00, Half Gallon - \$11.00, Quart - \$6.00, Pint - \$4.00.

According to the United States Crop Reporting Service, New York producers charged the lowest average price for syrup of any state. They would do well to give some serious thought to the price they charge this year before they "give it away." With the sharp increase in the cost of fuel, labor, containers and practically everything used in the business, it will cost at least \$3.00 more to make a gallon of syrup this year than it did last year. See "Pricing" in the letters to the editor, this issue.

<p>IN STOCK: LAMB TUBING SUPPLIES Electric Tappers GORDON H. GOWEN Tamarack Farm Alstead, N. H. 03602 835-6531</p>

KRESS

Jugs

produced from
XT Polymer



Containers for the
food product of
QUALITY



Half Gallon,
Quart, Pint
& Half Pint jugs of
QUALITY

Kress Creations, Inc.

339 Christian Street
Oxford, Conn. 06483
Phone (203) 264-9898

Women's Page

Editor, Mary Lou Sipple

Mrs. John (Ellen) Adams of Smada Farms of Greene, N. Y. sent me this delicious one dish meal:

Country Ham Steak

¼ cup butter or oleo
1 small head cabbage (1½ lb.) coarsely shredded
½ tsp. salt
1 fully cooked smoked ham center slice 1½ inches thick
3 medium cooking apples, cored and cut in wedges
4 TB pure maple syrup

In 12 inch skillet, over med. high heat, cook cabbage, salt and butter, stirring frequently until cabbage is tender-crisp (about 5 min.) Spoon cabbage evenly into 13 inch x 9 inch pan. Place ham slice on top of cabbage; tuck apple wedges into cabbage, around ham. Drizzle maple syrup over all. Bake 350 degrees for 40 min. or until ham is heated through and apples are tender, stirring cabbage occasionally. Makes 6 servings. Good with sweet potatoes, and spicy mustard on the ham.

Sipple's Maple Syrup French Dressing:

1/4 cup salad oil
1/8 cup vinegar
1/4 cup catsup
1/4 cup dark amber maple syrup
1/2 tsp. garlic salt
dashes - salt & pepper
Mix well and keep refrigerated.

Sipple's Maple Bar-B-Q Sauce

1 cup dark maple syrup
¼ cup chili sauce (I use my own)

1 TB worcestershire sauce
1 TB vinegar

I know it is only February, but the July issue might be a might late for this one - also from Ellen Adams.

Maple Switchel

1½ cups dark maple syrup
½ tsp dry ginger
1 cup vinegar
1 gallon water

Mix, and adjust ingredients to taste. Serve on crushed ice. and Ellen says, "in the shade"!!

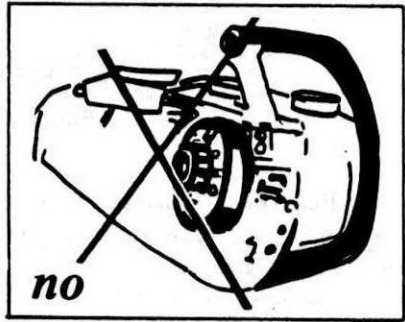
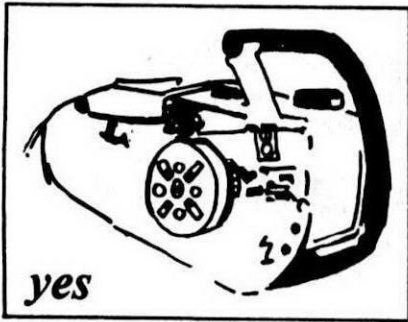
(I remember "switchel" from way back, but no one ever had a recipe for it. Gonna try this one!)

**SHOW OFF YOUR FANCY
SYRUP IN**

JUGS BOTTLES JARS
**MAPLE PRODUCTS SELL
BEST IN GLASS**

**WE ALSO CARRY MANY
TYPES OF PLASTIC CONTAINERS
INCLUDING THE KRESS JUGS.**

Send for complete list
M. R. CARY CORPORATION
219 Washington Square
Box 2102
Syracuse, N. Y. 13220

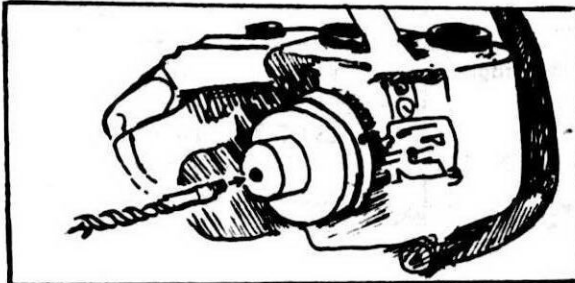


E-Z-Tach DRILLING ATTACHMENT FOR CHAIN SAWS

- **INSTALLING TIME LESS THAN 5 MINUTES**
Remove bar and chain with wrench furnished by the saw manufacturer.
- **SPEEDY DRILLING DRILLS ARE 7/16 LEFT HAND DOWEL TYPE**
- **SAFETY**
Since this attachment is mounted on the outside of the clutch drum, the drill will stop with the motor idle.
- **FITS MOST HOMELITE, STIHL, PIONEER, POULAN, McCOLLOCH, PARTNER, FRONTIER, ETC.**

We can only fit saws that have the drive-sprocket toward the motor as shown. Be sure to give us make, model, and when possible, the O.D. measurement.

"Tapping the trees is no longer the drawn out job it once used to be. There is now an adapter kit for tapping trees available to chain saw owners and once attached, the sugar maker can tap his trees in half the time. Manufactured by Nelson Maine, Hillsboro, N.H., this drilling attachment is mounted on the outside of the clutch drum. As a safety precaution, it stops when the motor is at idle."—Chain Saw Industry & Power Equipment Dealer, Nov-Dec 1973



\$50.00
AT YOUR DEALER

Extra 7/16 left hand bits are 6.00 with attachment order 7.00 if ordered separately

SEE YOUR DEALER OR SEND CHECK OR MONEY ORDER FOR 50.00 TO NELSON MAINE P.O. Box 463, Hillsboro, N.H. 03244 Phone (603) 428-7284

Send your drill attachment along with \$12.00 and I will machine it and return it to you with one Bradpoint drill postage paid.

BOB LAMB'S CORNER

PACKAGING MAPLE SYRUP —

Here are some suggestions I have gathered from successful Maple Producers on packaging.

Maple Syrup is a natural food, without any added preservatives, and must be handled carefully. I am told that the following steps are the surest way to package maple syrup in any type container.

1. Package in a clean, dry, vermin free area.

2. Pack all Maple Syrup at from 180° to 190° and maintain this temperature during all packaging. Use a thermometer. Never go over 200° as syrup will darken.

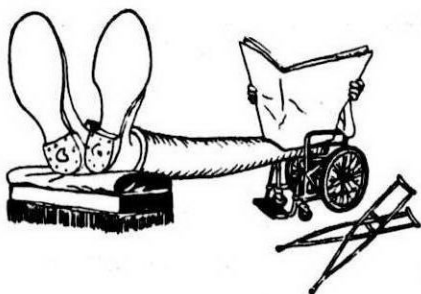
3. Do not pack Maple Syrup in cold containers, warm them even if you have to set them in front of an electric heater.

4. Pack hot, seal the container tightly. Invert or lay on its side 10 to 15 minutes to pasterurize area not contacted by hot syrup. Retighten cap, then let cool with containers far enough apart, so air can circulate and cool evenly.

5. Fill jugs from ½" to ¾" of tops.

6. Avoid storage or display areas subject to a good amount of temperature changes. If unavoidable, invert momentarily, each package at least once a week.

7. I am told that if you use a pressure sensitive label, with vinyl base; the label will tear off in one piece when the container is empty and might become an ornament. Put the label above the art work or tie a tag on the handle.



For further information see pages 76-78 in the "Maple Producers Handbook on "PACKAGING" U.S.D.A. agriculture handbook # 134.

In the National Maple Syrup Digest of July 1973, see Dr. Kissinger's article entitled Yeast, Fat Jugs, and Hot Syrup.

Rodents:

A few months ago I happened to read an article under "letters to the editor" in a rural Canadian magazine.

This party had had rodent problems. At first they used poison and traps. Then they read an article about the use of Instant Mashed Potatoes. They tried them and ever since have been completely free of rodents.

What happens is this. The rodents fill themselves with the dry potato flakes, take a good drink of water (body moisture would probably be sufficient) then bloat up and die.

I assume this might not be as effective if there was some other food available that they preferred.

AND ANOTHER THING — We are always talking about the weather during the Fall and Winter before a good sap run. I don't believe there is any thing to it whatsoever. It all depends on what kind of weather you get at your particular bush - when it's time for the sap to run.

Bob Lamb

This is a paid advertisement

FOR ALL YOUR
 MAPLE SYRUP NEEDS
 Think of
 SMADA FARMS INC.

WE STOCK

Sap buckets, covers, spiles, filters,
 bits, thermometers, hydrometers,
 cups, sugar molds, storage and
 gathering tanks, sugar boxes,
 cream jars, to name a few.

GRIMM - LIGHTNING
 EVAPORATORS
 (wood or oil)

LAMB

Tubing and fittings

KRESS - BACON JUGS
 GREEN MOUNTAIN CANS
 (all sizes)

SOME USED EQUIPMENT

WE BUY AND SELL
 BULK SYRUP

ORDER EARLY

FREE CATALOG - WRITE

**Smada
 Farms
 Inc.**

Star Route Rt. 41 N
 GREENE, N. Y. 13778

607-656-4058

SAP PRICES

Each year in the February issue, we publish a chart of the sap prices paid by one New York Producer for the past year and the proposed price to be paid in the coming season along with the respective retail and wholesale price of syrup in consumer packages.

Please remember, this chart is published 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	1979	1980
Retail	16.00	20.00
Wholesale	12.20	15.00
Sap Brix	per. gal	per. gal
1.5	.03	.032
1.6	.043	.046
1.7	.056	.060
1.8	.068	.073
1.9	.08	.086
2.0	.089	.096
2.1	.098	.106
2.2	.106	.114
2.3	.113	.122
2.4	.12	.13
2.5	.127	.137
2.6	.134	.145
2.7	.141	.152
2.8	.148	.16
2.9	.154	.166
3.0	.161	.173
3.1	.168	.181
3.2	.174	.188
3.3	.18	.198
3.4	.187	.202
3.5	.193	.218
3.6	.20	.216
3.7	.207	.224
3.8	.213	.230
3.9	.219	.236
4.0	.226	.244

LETTERS:

Dear Lloyd,

It's great to have a listing of all the NY maple meetings, if you can't make one then you can plan on another. Why not list all meetings in other states? I'm sure the directors could get this information to you. I'd like to attend some other state meetings to get an idea of what they're doing.

I'd also like to see a list of the dates for maple tours in each state, it would be nice to have them coordinated so a two week trip could cover several states with a day or so between for sight seeing. An additional list of maple festival dates and locations (N. Y. and elsewhere) would be helpful too.

Dave Nascimbeni
Glen Durham Sugarhouse
R. D. 2 Cario, N. Y. 12413

BUDDY SYRUP

Convert to marketable grades
by new FDA approved process
For information and prices contact
CLAUDE HILLS, Consultant
Flourtown, Pa. 19031
(215) 233-0132

SHERWOOD Tubing & Fittings
NOLET Mainline Fittings
CANADIAN Lightning Evaporators,
Tanks, and Supplies.
Assortment of used evaporators,
tanks, buckets, vacuum pumps, etc.

BUYER OF BULK SYRUP
BRUCE OR KENNETH BASCOM
Bascom's Sugar House
Alstead, N. H. 03602
Tel: 603-835-6361 or 2230

Smada Farms Inc.

IS PLEASED TO ANNOUNCE THEY ARE THE FACTORY
DISTRIBUTORS FOR GREEN MOUNTAIN CAN CO.,
SERVING N. Y.; PA; OHIO & MICHIGAN WITH A
QUALITY SYRUP CAN THAT HAS WELDED SEAMS, NO
SOLDER INSIDE. WE ARE STOCKING ALL SIZES.

AVAILABILITY NO PROBLEM GUARANTEED AGAINST LEAKAGE

Price quotes to dealers and Associations upon request.

SMADA FARMS INC.
STAR ROUTE

GREENE, N. Y. 13778

607-656-4058



IF YOU MAKE MAPLE SYRUP YOU NEED OUR CATALOG

HERE ARE JUST A FEW OF THE ITEMS AVAILABLE



MODERN SAP COLLECTION
Throw-Away Bag



Trouble With Moldy Syrup?
Use **FERMIBAN**
Inexpensive!



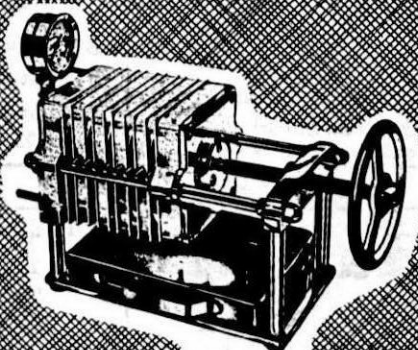
TAPERED BUCKET
BRUSHES
Full Size



REFRACTOMERS
For Extreme Accuracy
In Syrup Testing



Old Fashioned Earthen Jugs
All Sizes
2 Oz. Up To One Gallon



PRESSURE FILTERS FOR
SPARKLING CLEAR SYRUP



POLETHYLENE LINERS
For Leaky
or Rusty
Buckets

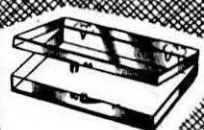


CANDY CUPS

GOLD FOIL
Pressure Sensitive
NAME STICKERS



Light Weight
Big Capacity
GATHERING PANS



Plastic As Well As Paper
CANDY BOXES—Many Sizes



Glass Jugs
Bottles - Decanters
Plastic Bottles
and Jugs
All Styles and Sizes
of Syrup Cans

Non Toxic Paint
For Buckets and Tanks



ALL MAKES
OF EVAPORATORS

SEND FOR A
FREE COPY
OF OUR CATALOG



REYNOLDS

SUGAR BUSH INC.

ANIWA, WIS. 54408 Ph: 715-449-2057

American Maple Products

Newport, Vermont 05855

- produces maple syrup,
- buys bulk Maple Syrup from other producers,
- packs Pure Maple Syrup,
- makes Maple Candies, Maple Sugar and Maple Butter,
- wholesales these products to the retailer
- and supplies leading food manufacturers with Bulk Maple Syrup or Maple Sugar.

CAN WE HELP YOU WITH YOUR MAPLE REQUIREMENTS?

LES JONES' "Do It Yourself" Instructions available. For convenience buy your burner locally; use "Do It Yourself" DETAILED Instructions for easy and CORRECT installation.

Mrs. Les Jones

Holcombe, Wisconsin

54745



**MAPLE
PRODUCTS, INC.**
JACKSONVILLE, VERMONT
05342

Tel: 802-368-2345

Dealer for a full Line of maple sugaring equipment specializing in "Leader" and "King" evaporators.

Many sizes of gathering and storage tanks kept in stock as well as the small utensils used in making maple syrup.

Buyer of bulk maple syrup.

Processor and packer of maple syrup and candies in consumer packages.

Marketing Maple Syrup

By
W. Barry Branon
Maple Syrup Producer
Plattsburgh, N. Y. 12901

Retailers and processors market most of our maple syrup. They are absolutely necessary if we are to sell our product. They are as necessary to marketing as fuel is to production. Producers should protect them in the market place.

Only a small percentage of the crop goes directly from producer to consumer.

If the people who sell our crop do not make a good profit they will not market our product. Stores and markets should make 30% of the selling price.

Producers should be happy to have retailers make a good profit. They will then sell more maple syrup. Good profit is a guarantee of a good market.

Producers should not cut the retail market. They should be competitive, not destructive. Producers should not establish prices that leave no room for the packer and retailer. If a producer packs his own maple syrup he should get the packers profit. If he retails his syrup then he should also get the retailers profit.

We should follow the leadership of our fruit growing brethren. They have eliminated the cheap product at the orchard.

Several co-ops have done much to

increase price and markets in recent years. These organizations should have our support. We need to keep them in operation. Some of us do not support them but are very happy to sell our product for the higher price they have directly and indirectly helped establish. Kind words are not sufficient support. We should all be making a financial contribution to the co-op in our area.

We should not talk about the high price of our product. We have all accepted the same increase on everything. Very few people buy on price alone. They are more concerned with the product. When prices are high many people are wary of a cheap item.

A Method of Pricing Maple Syrup

Following is a rule of thumb method for pricing a gallon of maple syrup.

Retail Price: double drum price or wholesale price divided by 70%.

Wholesale Price: (gallon packed for retail sale) drum price plus 45% or 70% of retail price.

If drum price is \$1.00 per pound, \$11.00 per gallon, the following prices should prevail:

Wholesale Price:

$$\$11.00 + 45\% = \$15.95$$

or

$$70\% \text{ of } \$22.00 = \$15.40$$

Retail Price:

$$\text{double drum price } \$11.00 \times 2 = \$22.00$$

or

$$\$15.95 \text{ wholesale divided by}$$

$$70\% = \$22.70$$

Buyers who supply and distribute drums, buy the syrup and transport it to their warehouse, probably spend 10% of the drum price.

If a producer has his own drums and delivers his syrup he should get 10% over the drum price.

Sugarbush Protection

At the recent North American Maple Syrup Council Meeting held at Deerfield, Mass., scientists announced the clearance of the insecticide Sevin for the use in the control of leaf chewing insects in sugarbushes.

Through the combined efforts of the U. S. Forest Service, The Vermont Department of Forests, Parks and Recreation and the Univ. of Vermont, experiments have shown that the quality of the maple syrup produced in sugarbushes sprayed by the recommended doses of the insecticide is not impaired.

Detailed information on the results of the spraying experiments may be obtained by writing Box 968, George D. Aiken Sugar Maple Laboratory, Burlington, Vt., 05402.

**APPROVED LABELS FOR
MAPLE SYRUP, CREAM & SUGAR**

**No more Hand-stamping
Everything on 1 Pressure-Sensitive
Label or Tape for use on
Metal, Plastic or Glass Containers**

ATTRACTIVE COLORS—ALL SIZES

For Prices and Samples write to
WILLIAM L CHALMER
150 Traverse Blvd. Buffalo, N.Y. 14223

**WANT TO SAVE LABOR
AND BOILING TIME?**

**EVAPORATOR
GAS BURNERS**

**Manufactured By
ELMER WINTER**

**11171 Sisson Highway
North Collins, N.Y. 14111**

Engineered for the Job
Clean Pans, Instant Heat, No Soot
Proven since 1952

No Electricity Needed
No Service - Nothing to Wear Out
Can be used in any
evaporator

SUGAR BUSH SUPPLIES CO.

- COMPLETE SUPPLIER TO THE MAPLE PRODUCER
- WE STOCK KRESS, BACON, LAMB TUBING SYSTEM
- BEAUTIFUL AUTUMN LEAF CANS
- LABELS & CREAM TUBS
- LEADER, KING, VERMONT EVAPORATORS NEW & USED

2611 Okemos Road
Mason, Michigan 48854
Tel - (517) 349 - 5185

GIVE US A CALL OR
WRITE FOR CATALOG

FROM THE CHAIRMAN

Dear Friends;

As I stated at the banquet of the North American Syrup Council in October, how humbled I am to have been elected chairman of your Council, and to be associated with so many great Maple people. Since the summer of 1965, while Ruthanne and I attended a maple tour in N. Y. state, where we heard Dr. Willits discuss research at the lab, heard about the handbook, the Council, and the Digest, and all the activity in the Maple industry I seemed to have been "caught" up in "MAPLE". I only hope that I can keep up the high standards set by my predecessors.

The other day, I got thinking about all the maple trees around that are not being tapped and why their owners don't have the maple hobby or the disease that "My Maple Friends" and I do! If my Dad had not kept making Maple Syrup when a good number of his neighbors stopped then I would not have met many of you. Also, my thanks and admiration goes out to the many hundreds and hundreds of these producers, who as surely as spring arrives, go out and make their Maple Syrup without any "fanfair" about it. However, with the economic crunch affecting every industry, including Maple production, one should take note of his cost of production, and try to find ways to hold that line. Still we have to keep raising our prices each year to the consumers just to stay even, so that we don't have to stop

producing Maple Syrup because of a lack of returns as so many have before us.

In the coming years, I feel that we have a great challenge to find ways to fuel our evaporators with fuel as efficient as oil, or perhaps new ways to convert sap to syrup. This is where all producers can help out by attending meetings that your extension staff in each state and province provide. By swapping ideas and experiences, I am positive that better ways and methods will be found. Upon attending these maple meetings I believe you will find many new ideas or techniques that you can hardly wait to try out!

More support will have to be given in the coming years to our research facilities, such as making our legislators more aware of the importance research has in our industry, as we can not afford to loose any more of our research facilities. And to our researchers who have to wait for the seasons and sometimes for years to complete their projects, (which few of us would have patience to do) we are greatly indebted.

With our changing times, every director of the Council, every extension agent, and all researchers would be glad to hear from you, our fellow maple people, with projects, subjects, activities, or any thing which you feel would be for the good of the Maple Industry. Sometimes we are too close to see the needs, and with many minds and hands, we shall work together to solve our collective needs.

With the Maple Season just ahead, may it be your most successful.

Sincerely yours,
Ronald N. Shaw

At Last-

New Maple Grading Regulations

Taken, in part, from the Federal Register, Vol. 44, No. 242, December 14, 1979.

UNITED STATES STANDARDS
FOR GRADES OF MAPLE SYRUP.
Agency: Food Safety and Quality
Service, USDA.

Summary: This rule will amend the voluntary grade standards for maple sirup to conform to the Food and Drug Administration's new Standards of Identity. This rule adopts departmental policy toward uniform, sequential grade nomenclature. The effect of this rule is to improve the standards.

Effective Date: January 14, 1980

Product description.

(a) "Maple sirup" means maple sirup represented as defined in the Standards of Identity for Maple Sirup (21 CFR 168.140) issued under the Federal Food, Drug and Cosmetic Act. The solids content of the finished maple sirup shall be not less than 66 percent by weight (Brix)

(b) Federal inspection certificates shall limit "U. S. Grade B" maple sirup to a quality suitable for reprocessing only. "U. S. Grade B" maple sirup shall be considered unsuitable for

consumer labeling.

Grades.

(a) "U. S. Grade A" is the quality of maple sirup that:

1. Has good color.
2. Has good flavor and odor.
3. Is practically free from defects; and
4. Is practically clear.

(b) "U. S. Grade B for Reprocessing" is the quality of maple sirup that:

1. Has fairly good color.
2. Has fairly good flavor and odor.
3. Is fairly free from defects.
4. Is fairly clear and
5. Is suitable designated or labeled as a reprocessing grade to qualify for Federal grading, inspection or certification. Reprocessing grade maple sirup shall not be packaged in consumer size containers.

(c) "Substandard" is the quality of maple sirup that fails to meet the requirements for U. S. Grade B for Reprocessing.

Color.

(a) General. Color has reference to the color of maple sirup when examined by means of the USDA permanent glass color standards for maple sirup.

(b) Availability of color standards. The color standards referred to in this section are available only from the approved supplier under a license from the U. S. Department of Agriculture: Phoenix Precision Instrument Division, The Virtis Company, Inc., Route 208, Gardiner, N. Y. 12525.

Classification of requirements.

(a) "A" classification - (1) "Good color" means that the sirup color is

bright and typical of maple sirup prepared from sound properly gathered sap; and, in addition, meets the following spectral requirements:

(i) U. S. Grade A Light Amber is as light, or lighter, in color than the USDA Light Amber Glass Color Standard.

(ii) U. S. Grade A Medium Amber is darker in color than Light Amber, but is no darker than the USDA Medium Amber Glass Color Standard.

(iii) U. S. Grade A Dark Amber is darker in color than Medium Amber, but is no darker than the USDA Dark Amber, Glass Color Standard.

(2) The sirups shall have a good maple flavor characteristic of the color, shall be clean, practically clear, practically free from damage, and shall be free from serious damage.

(b) "B" classification - (1) "Fairly good color" means that the sirup color is darker in color than the USDA Dark Amber Glass Color Standard, but is not off-color for any reason.

(2) The sirup has fairly good characteristic maple flavor, is fairly free from damage, is fairly clear, and is free from serious damage.

(c) Substandard classification. Maple sirup that fails to meet the require-

ments of paragraph (b) of this section shall not be graded above Substandard.

Explanations of terms.

(a) "Cloudiness" means the presence, in suspension, of fine particles of mineral matter, such as malate of lime, "niter," "sugar sand," calcium malate or other substances that detract from clearness of the sirup.

(b) "Clean" means that the sirup shall be practically free from foreign material such as pieces of bark, soot, dust, or dirt.

(c) "Damage" means any defect that materially affects the appearance, edibility, or shipping quality of the sirup.

(d) "Serious damage" means any defect that seriously affects the edibility or market value of the sirup. Badly scorched sirup, buddy sirup, fermented sirup, or sirup that has any distasteful foreign flavor or disagreeable odor shall be considered as seriously damaged.

(e) "Buddy flavor, buddiness" is an unpleasant flavor characteristic of sirup made from sap collected from maple trees as they come out of dormancy.

(f) "U. S. Department of Agriculture Color Standards" means the official U. S. Department of Agriculture Permanent Glass Color Standards for Maple Sirup.

EVERYTHING FOR THE MAPLE PRODUCER

Grimm, Lightning Evaporators,
Lamb Tubing and Supplies,
Bacon and Kress Jugs.

ORDER EARLY AND SAVE

HAROLD TYLER MAPLE FARMS
607-638-2921 Westford, N. Y. 13488

MAPLE PEOPLE

When tubing is in your system
And Sap is on the run
My thoughts are of the friendly folks
Who make the bushes hum

MIKE BERLINER

518-696-3235

HADLEY, N. Y. 12835

Determining the grade of a lot.

The grade of a lot of maple sirup covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (7 CFR 2852.1 through 2852.83) Provided, that:

(a) When certifying the color of a sample that has been officially drawn and which represents a specific lot of maple sirup, the lot shall be considered as being of one color if the number of color deviants does not exceed the acceptance number in the appropriate sampling plan. Any lot of maple sirup in which the number of color deviants exceeds the acceptance number shall be designated as a lot of "mixed color."

(b) No deviants for "serious damage" shall be allowed in grades above Substandard.

Reserved

(Sec. 203, 205, 60 Stat. 1087, as amended: 7 U. S. C. 1622, 1624)

Note — This final rule has been reviewed under the USDA criteria established to implement Executive Order 12044, "Improving Government Regulations." A determination has been made that this action should not be classified "significant" under those criteria. A Final Impact Statement has been prepared and is available from Thomas E. Crider, Processed Products Branch, Fruit and Vegetable Quality Division, Food Safety and Quality Service, U. S. Department Agriculture Washington, D. C. 20250.

Editors Summary:

We only printed about half of what

appeared in the Federal Register, what I considered to be the most important parts. If you're as thoroughly confused as I am, I'll try and unravel it into something I can understand.

There are three important changes:

1. Maple syrup shall contain 66% solids by weight (66 Brix). It used to be 65.5%. This higher density was adopted by some states, New York for one, several years ago.

2. The names of the three grades of maple syrup sold in consumer packages and formerly called Grade AA or Fancy, Grade A and Grade B (in New York — Light Amber Table Grade, Medium Amber Table Grade and Dark Amber Table Grade) shall now be called Grade A Light Amber, Grade A Medium Amber and Grade A Dark Amber. All requirements for these three grades, except the change in density, shall remain the same as before.

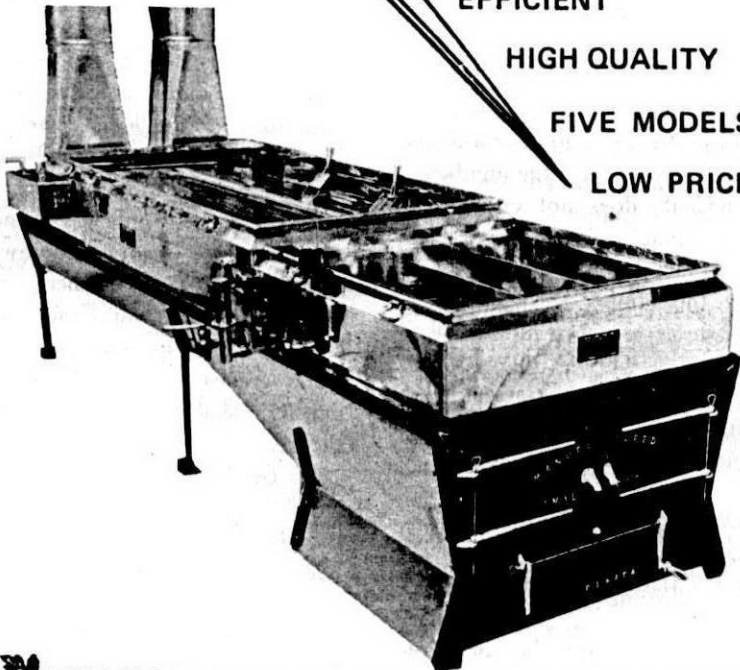
3. Grade B for Reprocessing, formerly called Grade C, shall be syrup that is darker than Dark Amber and have a fairly good flavor, clarity, purity and at least minimum density. Substandard shall be the grade for syrup that is below minimum density, off flavored, buddy or has other prominent defects.

New York Maple Producers

Very little change in the New York grading law will be needed in order to comply with the federal regulations. The Commissioner of Agriculture, Roger Barber, has indicated this can be done with a public hearing and will not need to go through the legislature. The date for this hearing has not been set yet. It will be soon but possible not in time to take effect this coming season.

EVAPORATEURS
Lightning
EVAPORATORS

YOUR FASTEST WAY
TO MAPLE SYRUP



RAPID
EFFICIENT
HIGH QUALITY
FIVE MODELS
LOW PRICED

✿ THE MODERN EVAPORATOR FOR PROGRESSIVE PRODUCERS SEEKING QUALITY PRODUCTS WITH SPEED OF OPERATION.

✿ MANUFACTURERS OF A COMPLETE LINE OF MAPLE SYRUP SUPPLIES.

Phone Or Write For Your Nearest Distributor.
Catalogues Available Upon Request.

SMALL BROTHERS INC.

Dunham, Quebec, Canada. Telephone (514) 295-2451

Invert Sugar Analysis of Maple Sap and Syrup

Mariafranca Morselli & Mary Lynn Whalen
Botany Dept., Vermont Ag. Exp. Station
University of Vermont
Burlington, Vermont 05405

Changes in the chemical composition of maple sap are associated with corresponding changes in the color and flavor of maple syrup (1, 2). Among the identifiable sap precursors that are involved in these changes is invert sugar, which originates from the breakdown of sucrose into two simpler sugars (glucose and fructose). By aseptically tapping individual trees to obtain sterile sap (3), we determined that the invert sugar level reflects the metabolism of the tree as well as the metabolism of the microorganisms upon the sap.

In the past, between 500-750 ml of sap were needed to detect small quantities of invert sugar present in maple sap. But we have needed a method for detecting invert sugar in small samples of sap collected from individually tapped trees, as well as a method for a routine invert sugar analysis of small syrup samples for detecting corn syrup adulteration. Corn syrups tested in our laboratory have yielded invert sugar levels in excess of 75%. However, maple syrup that is conventionally evaporated in the sugarhouse or laboratory and even stored for a long time has an invert sugar level under 15%. A test using small samples, available since 1941 (4), is routinely used in the medical field for screening diabetic

patients. This test has never been used on maple sap. Our current modifications make this test quite suitable for use in laboratories possessing minimal staffing and equipment. The modified procedure follows:

Invert Sugar Analysis of Maple Sap and Syrup.

1. Standards – to be run each time.

Run three or four dilutions of a 0.95% invert sugar standard solution including a 0% solution.

Invert Sugar Standard Solution (5)

9.5 g sucrose

5.0 ml hydrochloric acid

Bring to 100 ml volume with water. Store several days at room temperature for inversion to occur. Then dilute to 1 liter. It maintains stability (if refrigerated) for several months.

2. Reagent – Ames Clinitest Tablets

3. Sample size

Use 0.4 ml (or a dropper calibrated to that amount by determining how many drops of water weigh 0.4 g).

Note: This value was determined by running various sample sizes of both standards and saps, and determining where the maximum reaction and color development occurred.

4. Sample type and dilution

(a) Sap – undiluted

(b) Syrup – Start with a 1.4 syrup to water dilution; otherwise there is not sufficient water in the sample to

QUESTION?

Which U. S. President did the most to promote the maple syrup industry?

Think about it and watch for the July issue.

initiate the reaction. Continue diluting the sample (1:8, then 1:16, etc.) until the color is within range of the standard color scale.

Note: This method is most suited for the F, A, B, and C grade syrups, which are considered table syrups. There is a color interference with grade D syrups, which occurs only occasionally with C grade syrups. At this stage, not enough C grade syrups have been tested to determine why only an occasional syrup gives this reaction.

5. Test range — 0 to 0.355% invert sugar.

The test range was determined by using 20 different dilutions from 0% to 0.95% invert sugar standard solution and rating the color development according to the Ames (4) color comparator. Since our modification requires a different volume of test solution for maximal color development than does the Ames test, the standard color scales must be restandardized. This simply involves assigning the appropriate invert sugar percentage to the matching color. At a concentration higher than 0.355%, the response is no longer linear and further dilutions must be performed. Sample color that occurs between the established colors on the standard color scale must be interpolated.

Standard color scale	Invert sugar (%)
Blue (as in 0% invert sugar standard)	0.0
Blue-hint of green	0.01
Blue-green	0.03
Green	0.075
Olive-green	0.175
Brownish-green	0.25
Tan	0.355
Tan-orange	out of range
orange	of test, repeat
Brown-orange	on appropriate
Brown	dilutions

6. Procedure.

Place all samples (0.4 ml) of stand-

ards, saps, and/or diluted syrups into their own individual test tube. Drop one Clinitest tablet into each tube. Wait until reaction stops. Start stopwatch or note second hand on clock in order to time color development for 1 minute. After reaction has stopped, shake each tube. Then let sit undisturbed for remainder of the minute. Color development is stable after this, but color should be read within 5 minutes to prevent error due to drying. Shake tube again and read color development against standard color scale, which is correlated with the standardized invert sugar value. If dilution was made, multiply by dilution factor.

We hope that our work will further simplify this procedure for field analysis. Based upon the correlation of sap invert sugar to syrup grade, producers could then screen their sap for its potential grade. Packers could test their drums of syrup after storage for changes in invert sugar in order to help determine future use of the syrup as sugar, candy, or syrup.

This project was supported by Hatch Project #302.

References:

1. Proctor Maple Research Group. 1973. Sap quality determines syrup color. *Nat. Maple Syrup Digest* 12 (2): 22-23.
2. Morselli, M. F. 1977. Precursors in maple sap affect syrup quality. *Nat. Maple Syrup Digest* 16 (4): 16-17.
3. Weisman, L. F. 1978. Changes in amino acids and related compound found in *Acer saccharum* xylem sap preceding bud break. M. S. thesis. Cell Biology. Univ. of Vt., Burlington, p. 6-7.
4. Ames Clinitest Reagent Tablets. Ames Company, Division of Miles Laboratories, Inc., Elkhart, Indiana 46514.
5. Horwitz, W. (ed) 1970 *Official Methods of Analysis*. 11th Ed. of Official Analytical Chemists (A.O.A.C.) Washington, D. C. p. 532.



STOP!

If you're tired of gathering sap in mud or snow up to your behind, park your tractor or dozer and go see your Sapsucker dealer. If there's not one nearby, drop us a line. We'll show you how a small investment in a simple idea can save you lots of energy - **YOURS** and **THEIRS** - in the years ahead.

With the addition of the **AIRFLEX DRIVE** and a **KEROSENE** burning model to our line of Gasoline, Propane, Natural Gas, and Electric Drive Models, you'll see why Sapsuckers have been installed in over 300 sugarbushes and are probably the most widely used and versatile vacuum pumping systems available.

With **ALCOHOL**, **STEAM**, and **WATER TURBINE MODELS** in the works, and a growing list of hard to find switches, valves, fittings, engine conversion kits, and handy tools for the sugarmaker, you'll see that Sugar Camp is the leader in power and new ideas for maple.

No matter where you are, what kind of pump system you have, or how difficult your sap collection problem is, we can help. All you have to do is **ASK** - for a catalog.

SUGAR CAMP, INC.

R2 - Box 337, Rapid City, Michigan 49676 - Ph. 616-331-6328

Chainsaw Tapping Bit Modifications

Lewis J. Staats

Regional Extension

Specialist - Maple Syrup

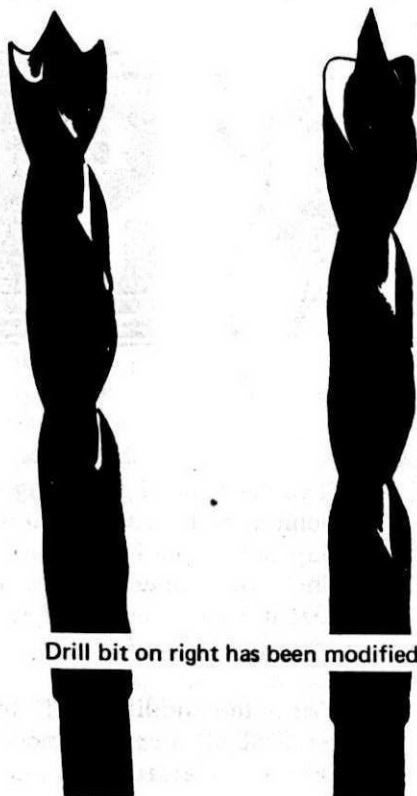
Heaven Hill Experimental Sugar Bush
Lake Placid, N. Y.

Most of the research work carried out in the use of a chainsaw with a drilling attachment for use in tapping sugar maple trees took place in late 1960's and early 1970's. The chainsaw with drill attachment continues to be used and satisfy many maple producers for tapping maple trees. It has been brought to the attention of the author, however, that some maple producers may not be aware of the necessary precautions in the use of high speed chainsaw tappers and may be able to improve their tapping performance. For this reason, it was felt that the following article be re-printed in the Maple Syrup Digest.

There are now several models of tapping attachments for chainsaws for maple producers to choose from.

A drill bit in a tapping attachment turns at speeds up to 6,000 RPM. At these high speeds during drilling the taphole, the bit must cut and penetrate easily or otherwise scorching may occur which will reduce sapflow. Most tapping attachments, when affixed on the chainsaw, turn counterclockwise thus requiring a left-handed drill. Some left-handed drill bits available are not necessarily designed for the job of tapping, and some modification is desirable for satisfactory results.

For the producers using a left-handed bit, as photo, which is furnished by at least one chainsaw adapter



Drill bit on right has been modified.

manufacturer ¹ and one major tubing distributor ², two modifications are necessary.

First, and most important, the two cutting faces at either side of the point should be filed to give more of a cutting angle (note bit on right). This can be done by using a standard 7/32 round chainsaw file on either side of the point, filing the back side of the cutting face away from the actual cutting edge. The filing should be done at approximately a 45 degree angle. Keep filing until the cutting face or groove meets the cutting edge. This increase in the cutting angle gives ease in tapping effort. Both cutting faces should be at the same angle.

Secondly, the cutting edges running along the drill shaft should be dulled

or dubbed to prevent possible oval tap-holes while drill bit is in the taphole. This can be done by running a small flat file on these cutting edges starting one inch from the point, leaving an inch of cutting edge near the point where a sharp edge is an advantage. File just enough to remove the sharp edge on the drill shank.

With these modifications applied this drill bit can be used to make round, leak-proof tapholes with speed and ease.

1/Len's Sharp Shop, Franklinville, N. Y.
2/ R. M. Lamb, Bernhard's Bay, N. Y.



R. R. 1,
ST. EVARISTE, BEAUCE Co.
QUEBEC, CANADA
418 459 6649
203 747 2863
603 837 2509

BULK MAPLE SYRUP

Government Inspected
Grades Guaranteed

LOWEST PRICES AND
ASSURED SUPPLIES
AVAILABLE WHEN
TENTATIVE ORDERS
ARE PLACED
IN THE FALL

NOW WAREHOUSING
in N. H. and VT.
English Speaking

Don't be caught short
next Spring. Call Now!

Think of Cook's for all your Maple Syrup Supplies

OUR STOCKS ARE
COMPLETE EARLY.
ORDER NOW

WE STOCK

Leader-King Evaporators
(wood or oil fired)

Sap Buckets, Covers,
SAP-SAKS

Syrup Cans

Tappers, Bits, Spouts, Filters,
Rubber Candy Molds
(asst. Patterns)

Storage and gathering tanks

Maple Cream Tub

Syrup Bottles

Pellets, Tubing, Plastic Jugs,
Etc.

Write for Free Catalog

H.W. Cook Farm Service, Inc.

Open Mon-Sat 8-5

Serving the Maple Industry for

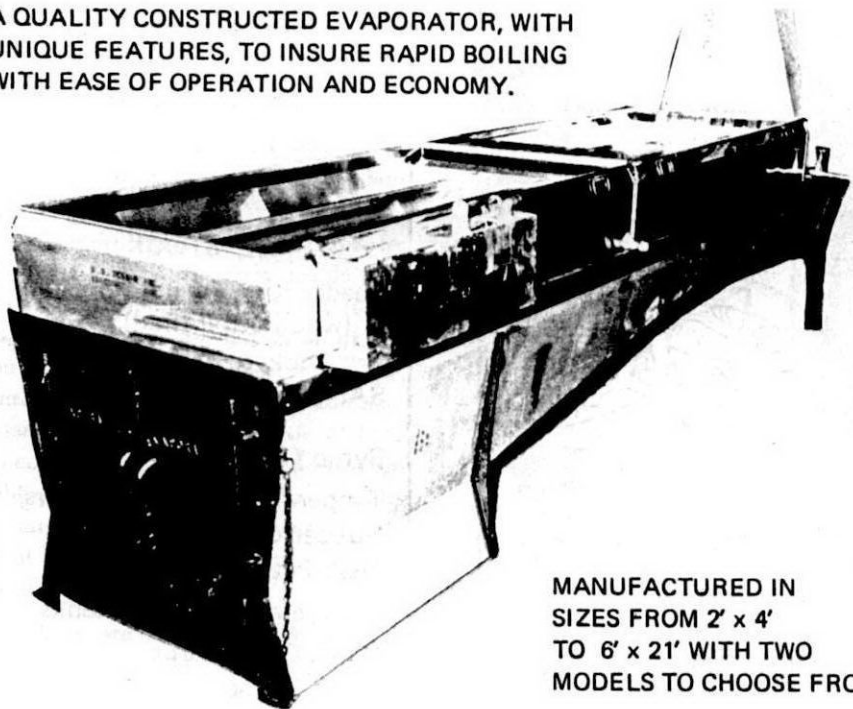
59 years

Phone: 315-852-6161
DeRuyter, N. Y. 13052

TEKNIK

SINCE 1926

A QUALITY CONSTRUCTED EVAPORATOR, WITH
UNIQUE FEATURES, TO INSURE RAPID BOILING
WITH EASE OF OPERATION AND ECONOMY.



MANUFACTURED IN
SIZES FROM 2' x 4'
TO 6' x 21' WITH TWO
MODELS TO CHOOSE FROM.

LET US ASSIST YOU WITH ALL YOUR SUGARBUSH
NEEDS - SERVICE AFTER SALES ASSURED . . .

Call or write for more information:

- IN CANADA



**LES SPÉCIALITÉS
TECHNIQUES
DE VALCOURT INC**

746 rue St-Joseph, C.P. 68
Valcourt, Qué., JOE 2L0

Tel. (514) 532-2244

- IN NEW ENGLAND
BAIN-GIRARD AND COMPANY

11 Village Road
Simsbury, Conn. 06070
(203) 658-5083

Classified

MAPLE INDUSTRY CONSULTANT — Layout and installation of vacuum tubing systems a specialty. Also, feasibility studies and sugarhouse design. References. Available for work anywhere in the maple region. DAVID R. MARVIN Johnson, VT. 05656, 802-635-7483.

WANTED—Agents or Distributors—To SELL complete line of Canadian Maple Syrup Equipment in the following states; Vermont, Eastern New York, and Maine. SMALL BROTHERS INC., P. O. Box 160, Dunham, Quebec, Canada, JOE IMO Tel: 514-295-2441.

MAPLE EQUIPMENT, new and used In stock - replacement pans for King, Leader and Vermont. Used Grimm 6' x 16' wood fired with S/S pans & hood. Leader 5' x 7' and 5' x 9' flue pans, 2-40" x 12' rebuilt King arches with new pans. Several others, various sizes. Write or call your needs. List on request. Sugar Bush Supplies, 2611 Okemos Rd., Mason, MI 48854. 517-349-5185.

FOR SALE—Used tubing with fittings \$.05 a foot. HAROLD REMMLER, 607-895-6666.

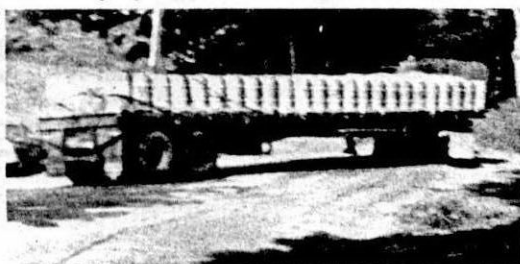
FOR SALE: 2-2000 gal. stainless steel, inside and outside, Cheese Vats, 30 ft. long located Richmond, Vermont, PAUL TINKER SALES, Box 326-Eastwood, Syracuse, N. Y. 13206. Ph: 315-476 6750.

FOR SALE: 5 x 14 Lightning Evaporator, 4 x 10 Grimm pans, 3 x 9 Vermont pans, 5 x 14 arch and burner for waste oil, waste oil burner only. Used buckets, covers & spiles. Assorted used gathering and storage tanks & other equipment. SMADA FARMS INC., Greene, N. Y. 13778. 607-656-4058.

FOR SALE: Used evaporators: Teknik 4' x 14' with two 7' flue pans, Small Bros. 5' x 12', 3½' x 12', Vermont 3' x 10'. Gathering tanks, buckets, covers, and spouts. Also Misc. used flue and syrup pans. MICHAEL GIRARD 11 Village Rd., Simsbury, Conn. 06070. 203-658-5083.

Vermont distributor — for Sherwood Maple Tubing & Fittings. Mainline orange & black pipe. Sapsucker pumps. HILTON FOOTE, Cornwall Cider Mill Rd., Rt. 2 Middlebury, VT. 05753. Tel: 802-462-2472.

 *La Beauce*
Pure Canadian Maple Syrup Co.



Mandoza Bolduc
69 Jackson Ave
West Hartford, CT 06610
Tel: 203-523-5763

THE RICHEST FLAVORED MAPLE IS FROM
BEAUCO COUNTY QUEBEC, CANADA
IMPORTOR - EXPORTOR

St Evariste., Quebec To You any quantity
Jacksonville, Vermont CONSUMERS: Fancy Packages
Hartford, Conn. PROCESSORS: 5 gals cans & Bulk

As you wish you are invited to solicit have served USA and Canada since 1937

FORECAST 1980

THE BIGGEST AND BEST MAPLE CROP EVER!



FOR JUGS • SHIPPERS • CARTONS • LABELS

See your
dealer
or write

BACON'S SUGAR HOUSE

JAFFREY CENTER, NEW HAMPSHIRE 03454

(603) 532-8836

DEALERS & ASSOCIATIONS CARRYING BACON'S JUGS

R. N. Johnson, Walpole, NH 03608	(603) 756-3321
N. H. Maple Producers Assn., Warehouse: Rt 106, Loudon, NH	(603) 783-9961
Richard Moore, RFD No. 8, Concord, NH 03301	(603) 267-8217
Devon Lane Farm Supply Inc., Daniel Shays Hwy., Belchertown, MA. 01007	(413)323-6607
Massachusetts Maple Producers, Shelburne Falls, MA 01370	(413) 625-2866
Donald Amero, W. Woodstock, VT 05091	(802) 457-3722
Clark Brothers, Wells, VT 05774	(802) 325-3203
Coombs' Maple Products, Inc., Jacksonville, VT. 05342	(802) 368-2345
The Dakin Farm, Ferrisburg, VT 05456	(802) 877-2936
Leader Evaporator Co., St. Albans, VT 05478	(802) 524-4966
David R. Marvin, Johnson, VT. 05656	(802)635-7483
Vermont Sugar House, Exit 3, I-89, So. Royalton, VT 05068	(802) 763-8809
Justus 'Dutch' Asthalter, Neversink, NY, PO Parksville, 12768	(914) 292-8569
Frank Barney, Sherman, NY 14781	(716) 761-6071
W. Barry Branon, 31 Tremblay Ave., Plattsburgh, NY 12901	(518) 563-1063
Lansing Burdick, 335 East Rd., Stephentown, NY 12168	(518) 733-5591
Campbell's Maple, Smyrna, NY 13464	(607) 627-6653
Charles R. Emerson, RD 1, Alfred Station, NY 14803	(607) 276-6481
Claude Sisson, Sr., Central Bridge, NY 12035	(518) 234-3194
Ralph VanBrocklin, RFD No.2, Canton, NY 13617	(315) 386-3036
John Wiggers & Sons, North Clymer, NY 14759	(716) 355-2511
Neil C. Wright,	(315) 245-2450
28 Liberty St., Camden, NY 13316	(315) 245-1434
J. Curtis Dom, PO Box 56, Wellersburg, PA 15564	(814)324-4414
Northeastern Pennsylvania Maple Producers Association	
Court House, Honesdale, PA 18431	(717) 689-2353
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
Sugar Bush Supplies, 2611 Okemos Rd., Mason, Mich 48854	(517) 349-5185
Kinney & Hodgkins Maple Supplies, Thorndike, ME 04986	(207) 568-3683
Kinney & Hodgkins Maple Supplies, Yarmouth, ME 04096	(207) 846-4570
Titcomb's Dairy, Farmington, ME 04938	(207) 778-4959
Wyman W. Manes & Son, East Orwell, Ohio 44034	(216) 583-2388
Richards Maple Products, 545 Water St., Chardon, Ohio 44024	(216) 286-4160
O. C. Stevens & Son, Maple Lane Farm, Mt. Gilead, Ohio 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
Chris Audley, Box 152, St. Andrews East, Quebec JOV 1X0	(514)562-2237



MAPLE PRODUCERS



ATTENTION

During the past few years the demand for Maple Syrup has reduced the surplus.



PLEASE

NOW

is the time to produce
MAPLE SUGAR and SYRUP
for the greatest return.



LEADER

Quality and Service since 1888



EVAPORATOR CO. INC.

25 Stowell Street
St. Albans, Vermont

802-524-4966
802-524-3931



- LAMB & MAPLEFLO PIPELINE SYSTEMS
- OIL FIRED EVAPORATORS
- GAS FIRED EVAPORATORS
- GAS & ELECTRIC TREE TAPPERS

**OVER
90
YEARS**

TREE TAPPERS —GAS/ELECTRIC

BACON/KRESS JUGS

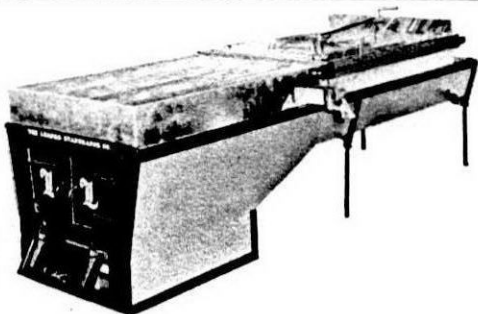
ALUMINUM STEAM HOODS

PARALLEL FLOW PREHEATERS

LEADER SPECIAL EVAPORATORS

MONITOR TANKS

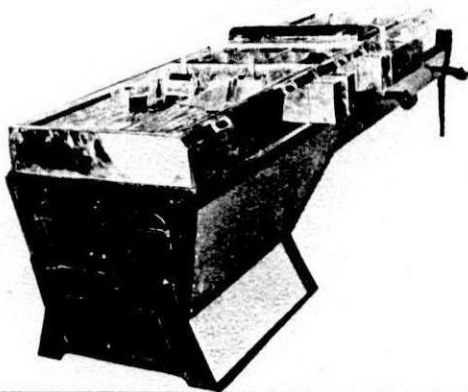
WARNER SPOUTS



KING EVAPORATORS

KING TANKS

SOULE SPOUTS



VERMONT EVAPORATORS

VERMONT SPOUTS

owned and operated by people interested in MAPLE to better serve
the MAPLE Producer — Contact us for all your MAPLE needs.

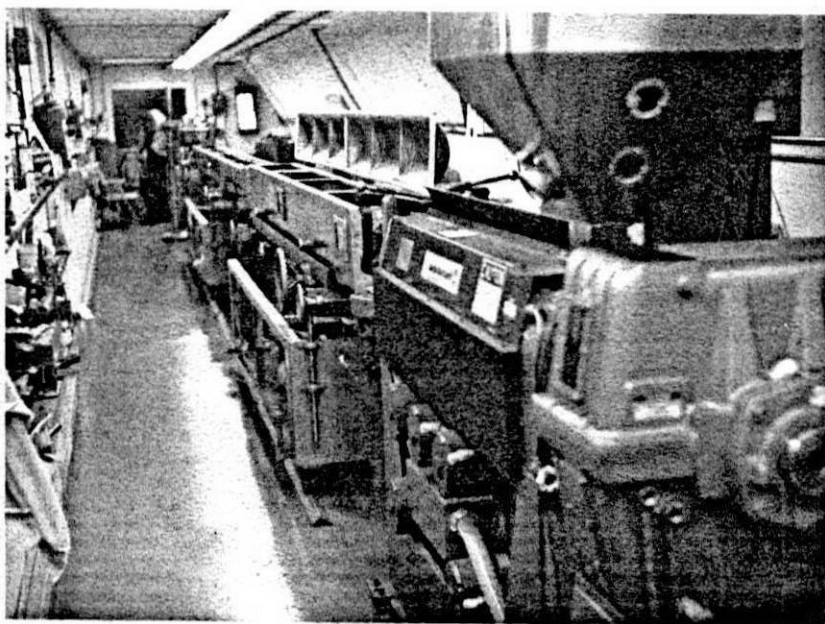
Leader Evaporator Co. Inc.

25 Stowell St., St. Albans, Vermont 05478

802-524-4966
802-524-3931

NEWS FROM LAMB'S

As this issue goes to press, our extruder still stands idle but it's all together and ready to start up January 7th. This should easily take care of all your needs in time for tapping.



You've all been wonderful to be so patient with us that I want to take this opportunity to give my most sincere thanks to everyone, especially the hundreds of friends who sent letters, cards and phone calls during my "vacation".

May you all have the best maple season you ever had.

Bob Lamb

This is a paid advertisement