

NATIONAL MAPLE SYRUP DIGEST NATIONAL



Vol. 16, No. 3

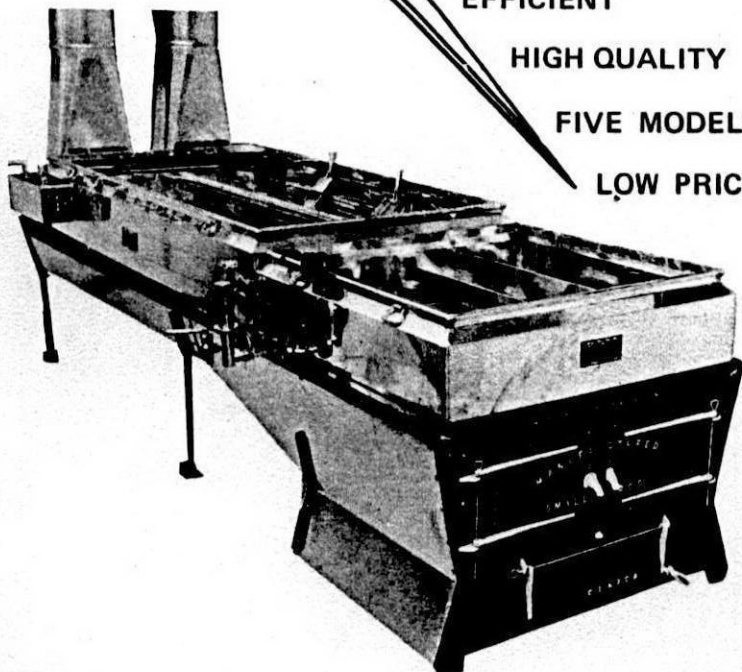
October 1977

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

Address
Correction
Requested

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) 295-2441

KRESS Jugs



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

NATIONAL MAPLE SYRUP DIGEST

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

Edited by Lloyd Sipple
Bainbridge, N. Y.

DIRECTORY OF OFFICERS

Rex Alwin Chairman
Mound, Minn. 55364 612-472-1344
Gordon Brookman Vice-Chairman
South Dayton, N. Y. 716-988-3617
Gordon Gowen Secretary-Treasurer
Alstead, N. H. 03602 603-835-6531

DIRECTORS

Orlando Small 207-778-2404
Farmington, Me. 04938
Russell Davenport 413-625-2866
Shelburne Falls, Mass. 01370
Mel Koelling Temp. Appointment
East Lansing, Mich. 48823
Terry Healey 616-582-7683
Charlevoix, Mich. 49720
Kenneth Bascom 603-835-2230
Alstead, N. H. 03602
Ture Johnson 216-834-4206
Burton, Ohio 44021
Ronald Shaw 705-325-6878
Hawkestone, Ont. L0L1T0
Edward Curtis 717-253-3759
Honesdale, Pa. 18431
Wilson "Bill" Clark 802-325-3203
Wells, Vt. 05774
Adin Reynolds 715-449-2057
Aniwa, Wisc. 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 \$2.00 per Year.



Printed by:
YORK MAIL-PRINT, INC.
Corner of Pruyn & Parsons Sts.
Bainbridge, New York 13733

COVER PICTURE

Jean - Marie Laroche sugarhouse,
Swanton, Vermont.

Photo by Bob Lamb

DIGEST ADVERTISING RATES

2 Page Spread \$242.00

Full Page 132.00

½ Page Vert. or Hor. 71.00

Column Inch 10.00

Classified 30 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

Both the Maple Syrup Digest and the North American Maple Syrup Council wish to extend their best wishes and many thanks to a grand old maple man.

After 44 years of serving maple producers, Bob Huxtable has sold Sugar Bush Supplies and will retire to devote his time to his many interests and hobbies. Bob's zest for maple and his deep belief in change and progress has provided us with one of the finest outlets for maple supplies and equipment possible.

Bob's personal interest and efforts for his customers has been one large factor of his most successful business. He would take orders night or day, come to your farm for on-the-spot-trouble-shooting, if your pans burned he would loan you equipment to get through the season, needless to say, this special treatment made him many friends as well as customers.



Another factor of his success was his unflinching belief in striving for progress. He has always been seeking out the newest and best equipment and supplies. He was first to introduce both glass and plastic packaging to Michigan, an early backer of the tap-

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

hole pellet, making available the newest gift box and retail packaging; to mention just a few.

Bob has led a varied and interesting life. Born in June of 1897, he made syrup in a black kettle on the farm, thus getting that maple fever in his blood as a young lad. In 1919 he graduated from M.S.U.; and for a few years he served as a clerk on the banana boats shuttling between Tampa and Central America. Then for twenty years he worked as a wholesale paper salesman. That is when the maple began to once again emerge to play a part in his life. He began to sell maple supplies part time on Cedar Street in Lansing; then in 1946 he moved to his present warehouse, making maple a full time venture in the early 1950's.

Bob is an avid collector of many things, motors, auto horns, antiques, especially antique autos. He is a very proud owner of the oldest production Oldsmobile in the world—a 1901 Serial No. 13, with a curved dash. He also has done some extensive traveling, including Australia and the West Indies. He is planning a trip to England as part of his retirement.

All of us maple producers will miss Bob and his special touch; but we also wish him well in his retirement and will be looking forward to hearing of his new accomplishments, interests and travels.

"THOTS FROM BOB"

We have no quarrel with the man who has lower prices:

Only he knows what his product is worth.

"We do not own the land and the trees in our Sugar Bushes, we have ONLY borrowed them from our children".

LETTERS:

ARCHIE'S SUGARBUSH

Dear Mr. Editor,

We ez had a maple meetin down here and my wife she sez, "Truthful Archie, sometimes she calls me Honest Archie, why dont you tell that nice Mr. Editor man what our meeting was all about." So I sez, "I will". Anyway we had 4 speechers and they talked on maple, according to the following.

1. Recognize the organizational and economic interdisciplinary feasibility of applying theory for evaluating various yields based on variations of thermal changes at different unregulated periods at the tap holes during the maple season.

2. Through computers it is hoped to hydrostatically compartmentize the resource according to differentiations of sap recovery by various positive action considerations. The negative aspects will not be considered in this time frame.

3. Predicting the arithemetical degression of loss or gain in sap volume from parallel monitored programming of various sizes of tubing on variations of slope. Responsive management capability must be projected to figure total costs. Flat land tubing will not be discussed at this time.

4. How much will a gallon of syrup cost?

So you see we had a real interesting meetin. Too bad you couldn't a been here.

Sincerely

Truthful Archie



Sherwood

MEDICAL INDUSTRIES

ATTENTION ALL PRODUCERS: 2ND ANNUAL TUBING SCHOOL

SATURDAY, OCTOBER 29, 1977 SHERWOOD FACTORY, ARGYLE, N. Y.
Experts in the field will give objective advice and recommendations on Installation & Economics of Tubing Systems and Sugarbush Operation.

Seminar and Tubing Demonstration will begin promptly at 10:00 A. M. at SHERWOOD FACTORY located: 40 miles north of Albany, near Glens Falls; from Canada take Route 87 (Northway), from Vermont take Route 4 from Rutland, easy connections from NY thruway.

NOTE, THERE IS NO CHARGE FOR THIS PROGRAM, BUT YOU MUST RESERVE YOUR PLACE BY POST CARD NOW! MORE INFO BY MAIL!!!

NEW THIS YEAR:

MODULAR SCREW - IN MAINLINE FITTINGS; STACKABLE, ALLOWS ROTATION OF FITTINGS TO PREVENT TUBING KINKING -

PRICING: \$.95 (1/2"), \$1.10 (3/4"), \$1.25 (1")

COMPLETE WITH BASE FITTING AND 4 CONNECTORS

1977-78 PRICING SPOUT/TEES (SAME AS LAST YEAR)

PER SET (1 spout, 1 tee, 1 cap) :	\$.23 per set
PER SPOUT :	\$.17 each
PER TEE :	\$.08 each
PER TEE PLUG :	\$.01 each
SPOUT PLUG :	\$.02 each

NOTE: NEW: spout/tee plugs will not blow out @ 70 PSI.

1977-78 TUBING PRICING (NO CHANGE FROM LAST YEAR)
Food-Grade Guaranteed (900' per box)

New Color Maximum Weather Resistant Green - Same Formula as Smoke

1 - 5 BOXES (up to 4500') :	\$.045 per foot
6 - 22 BOXES (5400' - 19,800') :	\$.035 per foot
23 and up (20,700' and up) :	\$.03 per foot

AVAILABLE: 100# TEST, VIRGIN, NSF APPROVED BLACK PIPE:

1/2", 400' coil :	\$.055 / ft.	\$22.00 per coil
3/4", 400' coil :	\$.085 / ft.	\$34.00 per coil
1", 100' coil :	\$.12 / ft.	\$12.00 per coil

Freight Collect or Pick Up at Factory: Payment With Order



Contact: MIKE BERLINER, Sherwood Med. Ind. Inc., Box 147, Argyle, New York 12809 U.S.A.
Phone: (518) 638-8222

DIFFERENCES IN SUGAR CONTENT OF SUGAR MAPLE SAP IN NORTHEASTERN UNITED STATES

by

William J. Gabriel

Research Geneticist

USDA Forest Service,

Northeastern Forest Experiment Station

Burlington, Vermont 05401

and

Donald W. Seegrst

Mathematical Statistician

Northeastern Forest Experiment Station

Upper Darby, Pennsylvania 19082

The authors recently completed a study of the nature and extent of differences in the sugar content of sap from sugar maple. During the study, carried out in conjunction with a program to select sweet trees, sugarbushes were surveyed in the six most important syrup-producing states in the Northeast: Maine, New Hampshire, Vermont, Massachusetts, New York; and Pennsylvania. The information presented here is based on a sample of 289 sugarbushes in these states.

The sugarbushes, or stands of tapped trees, were classified as ungrazed, grazed, or roadside because differences in sap sweetness were found among these groups in preliminary tests. We sought a sample of 100 trees from each bush but fewer trees were tested in some stands; so the average sample was 74.9 trees.

Most of the sugarbushes that were sampled were classified as ungrazed (77 percent). Thus we placed more emphasis on this class in our report.

The greatest difference in the average sugar content of sap from ungrazed bushes within a state was in New Hampshire, where the highest

bush average (3.36 percent) was nearly triple the lowest (1.18 percent). The producer with the latter must boil away 71 gallons of water to produce a gallon of syrup; his more fortunate neighbor with the highest bush average must evaporate only 26 gallons. Maine had the smallest difference in averages among ungrazed sugarbushes (2.31 percent to 3.52 percent).

In other states the averages ranged from 1.42 percent to 2.97 percent in Massachusetts; 1.63 percent to 3.80 percent in Vermont; 1.67 to 2.99 percent in Pennsylvania; and 1.73 percent to 3.70 percent in New York. The data suggest that with the possible exception of Maine, the differences between sugarbushes within individual states are large.

New York showed the highest state sap sugar average for ungrazed sugarbushes (2.64 percent), followed by Maine (2.60 percent) and Vermont (2.57 percent) (table 1). The tie between Massachusetts and Pennsylvania for the lowest state sap sugar average (2.29) suggest that there may be a difference between sugar maples in the more southern syrup-producing states and those in the north. New York also had the highest average for all sugarbush classes (2.76). A study of the data indicated that the differences in the averages for sugarbushes within each state and in those between states were significant. From this we have drawn the inference that there are factors, primarily environmental or genetic, that have resulted in superior production of sap sugar in certain stands and states. The partitioning of the effects of these was not within the scope of this study¹

EFFECTS OF STRESS ON SAP SWEETNESS

For several years, we have suspected that the grazing of sugarbushes causes an increase in sugar content, and data collected in this survey tends to confirm this hypothesis. In addition to comparing the sugarbushes in different states, we also classified the sugarbushes as grazed, ungrazed, or roadside stands and compared the sap sweetness of many bushes in each class over several states. However in some states no grazed bushes were reported.

Our survey showed that grazed and roadside stand were consistently higher in sweetness than the ungrazed, relatively undisturbed stands; however little difference in sweetness was found between grazed and roadside stands. The average sugar content for each class was: ungrazed, 2.50 percent; roadside, 2.87 percent; grazed, 2.99 percent. These percentages equal 34.4, 30.0, and 28.8 gallons of sap required to produce 1 gallon of syrup.

Differences in the sugar content of sap seem to be associated with the amount of stress on each sugarbush. We know that aged, decaying trees often produce stress crops of fruit, and have unusually sweet sap. Soil compaction and root damage caused by grazing livestock could result in increased sugar content of sap. Stress factors for roadside trees could be salt, exhaust emissions, embedded fence wire, line-clearance pruning, and mechanical damage caused by passing vehicles.

At this time we do not know whether grazing can be safely used as a tool to increase syrup production.

ORDER EARLY

AND BE READY WHEN THE
SYRUP SEASON COMES

WE HAVE ALL YOUR NEEDS

KRESS JUGS - ALL SIZES
LAMB TUBING & SUPPLIES
GRIMM & LIGHTNING
EVAPORATORS & PANS

SOME USED EQUIPMENT ON
FIRST COME FIRST SERVED
BASIS

WE BUY AND SELL
BULK SYRUP

We still have 12½ oz. glass
bottles for \$1.25 per case

Call John or Ellen and place
your order or write for free
catalog.

**Smada
Farms
Inc.**

Star Rt.

Rt. 41 N

GREENE, N. Y. 13778

607-656-4058

LIGHTNING - GRIMM
KRESS - LAMB

Through research, procedures for controlled, rotation grazing may be developed that would increase the sugar content of sap without causing appreciable damage to sugarbushes.

Table 1. Average sugar content of sap of ungrazed sugarbushes in the Northeastern States, in percent

State	Sugar content		State average
	Low	High	
New York	1.73	3.70	2.64
Maine	2.31	3.52	2.60
Vermont	1.63	3.80	2.57
N. Hampshire	1.18	3.36	2.43
Massachusetts	1.42	2.97	2.29
Pennsylvania	1.67	2.99	2.29

¹A more detailed account of the results presented in this paper will be published in the proceedings of the 24th Northeastern Forest Tree Improvement Conference.

**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
Syracuse, N.Y. 13201**



**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.

HOW DOES IT TASTE ?

Susan B. Merrow, Associate Nutritionist

Robert P. Clarke, Research Associate

and

Paul E. Sendak, Forest Economist

Vermont Agricultural Experiment Station

School of Home Economics

University of Vermont

Burlington, 05401

Great, sweet, different, salty, good, terrible, nice, sour, smokey, bitter, maple How do you describe the flavors of the foods you eat to someone else? If this seems hard, try getting two people to agree exactly on how a food tastes. While many characteristics of food can be tested by chemical and physical means, flavor is frequently the ultimate test for acceptability of a food product. Because we expect certain foods to taste the same each time we eat them, taste testing has become an important tool of the food industry for quality control.

This is particularly true of the maple industry. While the viscosity, clarity, density, and color of syrup can be measured by physical means, maple flavors can only be defined by organoleptic means or taste testing.

Not only are changes in production, processing, and storage of pure maple syrup judged by the effect on the flavor of the syrup but flavor is also one of the criteria used for grading syrup. The price paid for syrup also depends in large part on its flavor.

If flavor plays such a large part in the maple industry are there any ground rules for selecting the individuals who taste-test for flavor?

A research study was conducted by the Vermont Agricultural Experiment Station and supported in part by the Northeastern Forest Experiment Sta-

tion, the Vermont Maple Industry Council, and the Vermont Maple Sugar Makers Association to look into this question.¹

Simple questions rarely have simple answers.

It was obvious that in only one study we couldn't expect to find out about pure maple syrup all that it has taken years to find out about other food products. However, with the help of 16 male and 13 female University of Vermont student volunteers, we did find some interesting things.

Assisted by the Vermont Agricultural Experiment Station statistician, we designed a study to see if people who could recognize one or more very weak solutions of the four basic tastes salt, sweet, sour, and bitter - - were better at finding differences in flavors of pure maple syrup than people who were not as good at recognizing one or more of these four basic tastes. The seven syrups used, graded for flavor by inspectors of the Vermont Division of Markets, were Fancy, Grade A, and Grade B.

The ability to recognize the taste of salt, sweet, or sour did not seem to be related to the ability to tell differences among the different flavors of the maple syrups. However, although we could not prove it statistically, there did seem to be some relationship between the ability to tell differences

among the flavors of the syrups and the ability to recognize the taste of bitter.

Taste testers are often asked "How many samples can you taste before they all begin to taste alike?" Sweet things are known to be particularly difficult from this aspect. In our study, we found there was no fatigue effect when four triangle tests were judged one after another. When you take a triangle test, you are presented with three coded samples. You are told that two samples are the same and asked to find the odd one. When four triangle tests are taken, 12 samples must be tasted and judged. It can take a lot of tasting to find those four odd samples.

Some of the volunteers took a course in sensory evaluation of foods where they learned about the theory, practice, and potential of using one's senses as a measuring tool. No maple products were used in the laboratory exercises so that any possible improvement in ability to judge the syrups correctly would be due to the facts and skills learned in the course and not because of any training in identifying flavors of pure maple syrups.

The volunteers who took the course did as a group, better in judging the flavors of the maple syrups than those who did not take the course. However, the difference in ability was not big enough to be statistically significant because the degree of individual improvement was so varied and the number of volunteers was so small.

The volunteers who took the course were much more interested in the reasons for the study, much more reliable about keeping all the necessary appointments, and more anxious to learn the

results of the study.

Sensory evaluation is not only a skill in taste judgements, it is a profession that is both an art and a science. Taste testing can be very dull and boring or it can be exciting and fascinating. As in most professions the more you know about it the better you are at it. When production techniques and price depend on accurate judgements of flavor, every advantage should be given the individuals on whom depend the quality control of our maple products.

It was surprising to find that the volunteers who had never had pure maple syrup, disliked it, or had no preference for it over other table syrups did just as well if not better in picking the odd samples than those who liked it. Even those who used it once a year or less did just as well if not better in the taste tests than did those who use it often.

Last, but by no means least, are the conditions when judging flavor. Color is often associated with flavor, especially in maple syrup. To make sure the volunteers were judging the syrups for differences in flavor only, differences in the color of the syrups had to be camouflaged. After considerable experimenting we found that no color differences could be seen when the syrup samples were served in blue glasses, on dark brown trays, to volunteers sitting at a table covered with a dull black adhesive paper on which was placed a three-sided booth draped with red felt and lighted by a 25-watt red bulb. The syrups were always served at room temperature and every effort was made to avoid distracting background noises and odors. Taste testing is a serious business and taste testers need every bit of help you can give them.

Until further research on flavors and off-flavors tells us what makes pure maple syrups taste differently, we will need taste testers. It would help a lot if a research study could also be made to find out if training in differences among maple flavors makes people better taste testers.

Some people are just naturally better at detecting differences in maple flavors. As for now, the best way to find good taste testers would seem to be a screening test of as many people as possible to see which ones can repeatedly tell the difference among flavors of syrups they may be expected to meet on the job. But even this talent may be wasted or even worse, misleading. Each individual should be trained in the implications, importance, and potential of this highly specialized work. Equally important, each should be provided with the working conditions essential to the practice of this highly skilled art.

How does it taste? If the answer means dollars and cents, better be sure your tasters know their flavors.

¹Morrow, S. B., and R. P. Clarke, 1977, Sensory evaluation of flavors of pure maple syrup. Vt. Agr. Exp. Sta. Misc. Pub. 91.

**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**

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
Red "Golden Maple" Syrup Cans
(4-sizes)

(Our stock on CANS is complete all year.)

Tappers, Bits, Spouts, Filters

Rubber Candy Molds (asst. patterns)

Storage and gathering tanks

Maple Cream Tubs - Syrup Bottles

Pellets, Tubing, Plastic Jugs, etc.

**COME TO COOK'S FOR ALL
SYRUP SUPPLIES**

Write for Free Catalog

H.W. Cook

Farm Service, Inc.

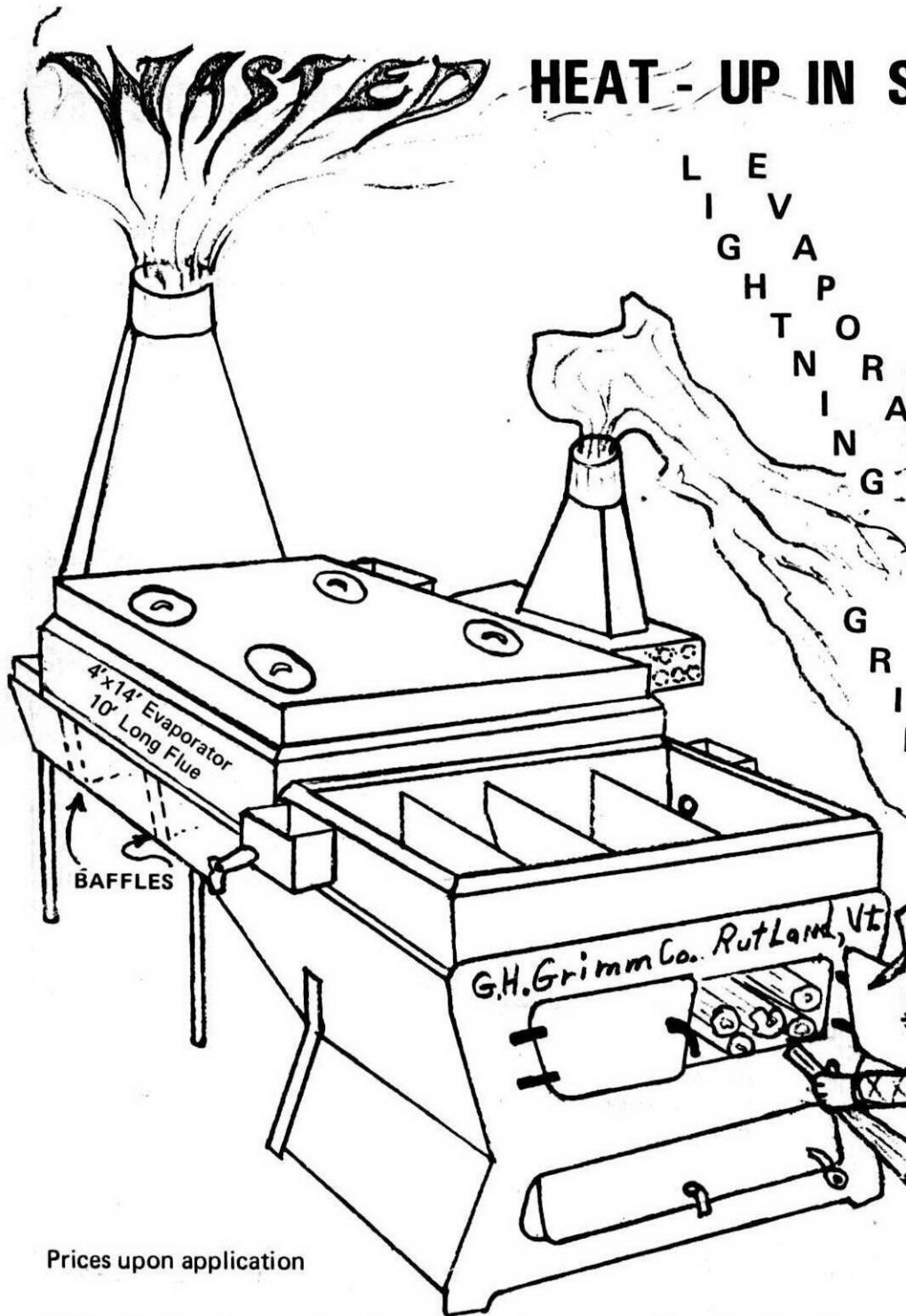
Serving the Maple Industry for
53 years.

Phone: 315-852-6161

DeRuyter, N.Y. 13052

HEAT - UP IN S

L E
I V
G A
H P
T O
R A
N I
N G
G R
I



Prices upon application

Write for literature and catalog — complete line of Sugaring Supplies

SMOKE - IS LOST FUEL AND PROFIT

raised flue _ longest flue pan in the industry

arch baffles hold heat in flues before going to stack

raised flues can't be struck while firing

gravity fed syrup pan minimizes burning

quality workmanship by experienced U. S. Craftsmen

Sap Preheated With Steam Saves — — —

saves up to 14% in fuel & boiling time

offset steam coils eliminate condensated drop back

"Hot" sap enters regulator at nearly 195° F.

collapsable for storage and shipping

aluminum & stainless -- resists rust

Profits Here — Not Up In Smoke

Manufactured by
G. H. GRIMM CO., INC.
Rutland, Vermont 05701

Phone 802/775-5411
802/773-9519





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!



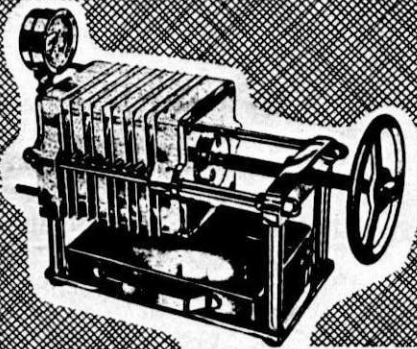
TAPERED BUCKET
BRUSHES
Full Size



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

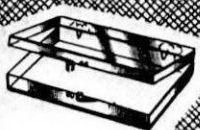


CANDY CUPS

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

CREDIT FOR MAPLE PRODUCERS

By

James D. Millner

Northeastern Forest Experiment Sta.,

INTRODUCTION

If you are in or plan to enter the maple syrup business and need investment capital, here are the sources and procedures you need to obtain a loan.

There are four lending agencies that are sources of credit for the maple producer: (1) commercial banks; (2) the Farmers Home Administration (FmHA); (3) the Farm Credit Service; and (4) the Small Business Administration (SBA).

BASIC FACTS NEEDED

All agencies need information about (1) the character and reputation of the borrower; (2) intended use of the funds; (3) the type of collateral offered; (4) the expected productivity derived from use of the loan; and (5) the dependability of the market for--in this case--maple products.

In addition, they will request information about the following; (1) all debts and accumulation of wealth, and (2) the type of property listed as an asset. The lending agency provides a special form or a section on the loan application form for the financial statement.

THE LOAN INTERVIEW

The prospective borrower should prepare beforehand the facts and fig-

ures about all aspects of his operation to strengthen his case for a loan. He should present his loan need specifically and account for the use of the entire amount requested. He should also be prepared to have answers for the following basic questions:

1. Will all the money being sought be needed at one time?
2. What type of collateral or guarantees will be offered?
3. What will the money be used for?

Here the importance of a good answer cannot be overemphasized. It should stress the constructive and profitable purposes that the funds will serve. If possible, a projection should be developed beforehand to show the positive results expected from the use of the loan.

4. How will the loan be repaid? Monthly installments, seasonal installments, or a combination of the two should be considered. The terms should allow for repayment at times when income is available.
5. What will be the source of repayment? Repayments can be made from expected earnings or from some other dependable source.

COMMERCIAL BANKS

Banks have been the major source of agricultural financing in the United States for more than 100 years, so they are logical sources from which to seek maple loans.

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

Differences among Banks

The lending policies of a bank are usually determined by its board of directors. A bank that favors agricultural loans is a desirable place to seek a maple loan. A local bank—or a bank that you do a lot of business with—is a good place to seek a loan.

If the loan officer knows little or nothing of the sugaring process, it is totally up to the loan applicant to present himself and his loan need in a positive manner. This will increase his chances of obtaining a loan.

Loan Procedure

The procedure followed by most banks is informal and simple. The applicant submits his loan request and financial statement. An informal interview with a loan officer usually follows, when the applicant is likely to be asked the basic questions.

The bank will probably inspect any properties offered as collateral and the maple operation or the site of the operation. If the loan is approved, then the note and mortgage, if any, are prepared and signed. The borrower's account is credited in the amount of the loan.

FARMERS HOME ADMINISTRATION

The Farmers Home Administration (FmHA) is an agency of the United States Department of Agriculture. Its purpose is to help provide credit, finan-

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**

cial counseling, and technical assistance to farmers, rural residents, and rural communities.

The FmHA recently prepared a profile of the maple industry and will use it as a guide when dealing with maple loan applicants.

Loan Programs

The FmHA has three programs through which maple loans might be obtained; (1) Farm Ownership Loans; (2) Farm Operating Loans, and (3) Business and Industrial Loans. These three programs fall into two categories: guaranteed loans, and insured loans. A guaranteed loan is made and serviced by an outside source, ordinarily a bank. The FmHA can guarantee up to 90 percent of the amount against loss. Insured loans are made and serviced entirely by the FmHA. The interest rates normally are determined by current cost of federal borrowing.

Farm Ownership Loans

Farm ownership loans are designed to assist people who operate family-type farms. Anyone who operates only a sugarbush but no other farm-based enterprise is not eligible for this type of loan. Any person who earns a sufficient income to have reasonable standard of living also cannot qualify for farm ownership loans.

Farm ownership loans are made for: buying or enlarging farms; constructing

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

OUR ONLY CLAIM TO FAME IS :

A
SAPSUCKER
IN YOUR BUSH...



A NEW SIMPLE WAY
TO COLLECT MAPLE SAP

SATISFIED
CUSTOMERS
IN
11 STATES AND
4 PROVINCES

4 YEARS OF
FIELD TESTING

WE TESTED THE
SAPSUCKER 3 YEARS
BEFORE WE BET
OUR MONEY ON IT-
YOU CAN BET YOURS !

To make more syrup
with less work
per gallon, write
for information
on this new Vacuum
Pumping Technique.

SAPSUCKER SUGAR CAMP

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

or improving farm service buildings (sugar house); and establishing or improving farm forests (sugarbush).

The interest rate is currently 5 percent annually on the unpaid balance for a term of up to 40 years. This may be ideal for someone seeking a long-term maple loan.

A major advantage of this loan is that the payments can be adjusted so that the borrower may make larger payments during periods of high income to build a reserve to cover periods of low income.



R. R. 1,
ST. EVARISTE, BEAUCE Co.
QUEBEC, CANADA

418 459 6649
203 747 2863

BULK MAPLE SYRUP

**Government inspected
Grades Guaranteed**

**LOWEST PRICES AND
ASSURED SUPPLIES AVAILABLE**

**WHEN TENTATIVE ORDERS
ARE PLACED IN THE FALL.**

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

Farm Operating Loans

Anyone who owns a farm with a sugarbush or potential sugarbush on it and meets the other FmHA eligibility requirements might obtain a maple loan through the farm operating loan program.

All farm operating loans are insured loans, so they are processed through the FmHA county offices. A maple loan obtained through this program can be used for purchasing sap and syrup production equipment and making sugarhouse improvements, or it can be used for wages of sugarbush employees.

The interest rate is usually slightly lower than commercial bank rates. The repayment schedule is adjusted to fit the borrower's ability to repay and stipulates that the borrower must re-finance the unpaid balance when he is able to obtain it from another source at reasonable rates and terms.

Business and Industrial Loans

A business and industrial loan can be used only for financing a business or industry that will either save jobs, increase employment, or help control pollution. Only the very large type of sugaring operation is likely to qualify under this criterion.

Anyone seeking such a loan should apply through the private lender, adhering to that lender's policies and procedures. Any legal entity—including individuals, private organizations, and Indian tribal groups—is eligible for business and industrial loans.

**IN STOCK:
LAMB TUBING SUPPLIES
Electric Tappers**

**GORDON H. GOWEN
Tamarack Farm**

Alstead, N. H. 03602 835-6531

FARM CREDIT SERVICE

The Farm Credit Service is the loan-administering agency of the nationwide cooperative Farm Credit System. The Farm Credit System has 12 farm credit districts in the United States. In each district there is a Federal Land Bank (FLB), a Federal Intermediate Credit Bank (FICB), and a Bank for Cooperatives. A maple loan could be obtained from either a Federal Land Bank or a Federal Intermediate Credit Bank. Loans made by the FLB are administered through local Federal Land Bank Associations, and loans made by the FICB are administered through local Production Credit Associations.

Federal Land Bank Loans

Federal Land Bank loans can be made for many general agricultural purposes or other needs of farm owners. They are usually long-term, ranging from 5 to 40 years. Land bank loans are tailored to the borrower's needs and his debt-paying capability. They are secured by first mortgages on farm land.

Here are the basic steps involved in obtaining a maple loan through a Fed-

eral Land Bank:

1. The applicant applies for a loan through his local FLBA. He presents his financial statement along with all the other pertinent information.
2. A representative of the FLBA investigates the applicant's reputation and assesses his managerial ability. He reports these findings and his recommendation to the FLBA's loan committee.
3. The farm is appraised and a report is submitted to the loan committee.
4. The FLBA committee considers the application along with the reports and approves or rejects the loan request. If the loan is approved, the applicant is then elected into membership of the FLBA.
5. Then another committee, the bank loan committee, considers the reports and approves or rejects the loan. This committee cannot approve a loan for more than the amount recommended by the FLBA loan committee.
6. If the loan is approved by both loan committees, it is offered to the applicant for his acceptance.

SOULE EVAPORATOR & CAN COMPANY

Fairfield, Vt. 05455, Phone: 802-827-4467

Famous, high quality "Canadian Lightning" sugaring equipment is available at Factory Direct Prices. We carry a complete line of storage tanks, gathering tanks, evaporators (wood, oil or gas), finishing outfits, filters and other supplies.



Bulk syrup — bought — sold — all grades.

Fair prices — one barrel or one thousand — all grades.

7. If the applicant accepts the loan, the farm title is examined; and if it is found acceptable, the loan is closed.

The procedure may vary to some extent among the different districts and various FLBA's.

Production Credit Association

Production Credit Associations (PCA) can provide short - and intermediate-term credit to farms, rural residents, and for selected farm-related businesses, with terms of up to 7 years. As with the FLBA, the function of the PCA loan committee is to review loan applications and determine whether or not to grant them.

The collateral requirements of PCA loans are dictated by the strengths and weaknesses of other credit factors. Usually the collateral accepted is such that it reasonably protects the association in providing the necessary control of repayment, while still allowing the borrower to maintain the constructive management of his business.

The terms of a maple loan obtained through a PCA can vary, depending

upon the particular borrower's situation. The applicant can get any reasonable amount of credit if he is judged by the loan committee to be a competent maple operator and if he has established a good credit record.

The loan procedure used by most PCA's is essentially the same as that used by FLBA's. The interest rates on PCA loans are usually about the same or slightly lower than bank rates. There is no interest on the loan until the money is actually drawn. Also, no interest is charged on any part of the loan that is repaid.

SMALL BUSINESS ADM.

The Small Business Administration (SBA) is a federal agency that exists to aid small businesses. Most of this aid is in the form of financial assistance. According to SBA definition, some of the maple operations that employ outside help can be considered small businesses.

Most loans granted through the SBA are guaranteed loans. This agency may guarantee up to 90 percent or

American Maple Products

- produces maple syrup, Newport, Vermont 05855
- 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?

\$350,000, whichever is less, of a loan. If an SBA-guaranteed loan is not obtainable, then SBA may consider making a loan on an immediate-participation basis with a bank. The SBA share cannot exceed \$150,000. A direct loan cannot be considered unless there is no other form of financing. Currently, direct loans cannot exceed \$100,000.

Whenever possible and feasible the SBA, and FmHA cooperate. There have been instances of joint financing between these two agencies.

SBA loans usually require collateral. Terms of repayment can be for as long as 10 years or up to 15 years when for construction purposes. Normally working-capital loans are limited to six years.

Currently, the interest rate on direct loans, or the SBA portion of participation loans, is 6-5/8 percent. Banks, within prescribed limitations, set the interest rates on guaranteed loans and their portions of participation loans.

Applying for SBA Loans

The prospective borrower must assemble the basic information needed for application for a loan from most other sources. To apply for an SBA loan, the borrower must first apply for and be refused a direct loan from a bank. He may then ask the bank for the loan under SBA's Loan Guarantee Plan or to participate with the SBA in a loan. If the borrower can't qualify under these programs, he may contact the nearest SBA office for a direct loan.

LAMB'S TUBING AND SUPPLIES LIGHTNING EVAPORATORS

(Wood - Oil or Gas Fired)

Orlon Filters - Paper Liners

All Sugaring Equipment

H. W. LEACH

Waterville, Vt. 05492 Ph. 644-2488

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, Vermont 05656. 802-635-7483.**

EVAPORATORS - All Makes - All sizes. From 2'x4' up to 6'x20'. Some used in the larger sizes. Some oil fired. We carry a stock of New Pans. **REYNOLDS SUGAR BUSH, Aniwa, Wisc. 54408.** Write for our supply catalog. It's Free!

FOR SALE - SUGAR BUSH - 180 acres, fully equipped, vacuum tubing, 6 x 14 Lightning Evaporator, 2 x 5 gas finishing pan, approximately 4500 taps. Modernized living quarters. Twenty miles north of Huntsville, Ontario. Geo. E. Armstrong and Sons Lumbering Ltd. R. R. 2 Bracebridge, Ontario Canada (705)645-5945.

1-3/12 Lightning, all s.s.; 1 40"x12, all stainless; 1 2 1/2"x8 all wood fired. Steam finishing unit and 15 h. p. oil fired boiler. Many small used items. **SMADA FARMS INC., Greene, N. Y. 13778 607-656-4058.**

Canadian Lightning Evaporators - in southern New England. **BOB COOK, Worthington, Mass. 01098, (413) 238-5827.**

6'x18' Leader Evaporator, flue pans 6'x5', 6'x6', syrup pan 6'x7' stainless steel side compartments, with steam hoods, other used equipment on hand: Tanks, Sugar & Cream Machines, Buckets, etc. **SUGAR BUSH SUPPLIES CO., 2611 Okemos Road, Mason, MI. 48854. Ph: (517) 349-5185.**

ANNOUNCING - - New distributor of Small Brother's Lightning Evaporators, gathering & storage tanks, sap vacuum equipment, and a complete line of maple syrup equipment. We sell Canadian Flo-master Tubing, Sherwood Medical Tubing, used buckets, and bulk syrup - all grades. Catalog mailed. **BRUCE & KENNETH BASCOM'S Sugar House, Alstead, New Hampshire, 03602, Tel. 603-835-6361 or 2230.**

THE BACON JUG



MAILING CARTONS

SHIPPING CARTONS

NAME & GRADE LABELS

8 OZ.

PINT

QUART

1/2 GALLON

GALLON

The Dealers and Associations listed on the following page can supply their customers and members with a complete line of "Bacon Jugs" from 8oz. to one gallon - Individual Mailing Cartons for pint to gallon sizes. Shipping Cartons for 12/8oz., 12/Pint, 12/Quart, 6/ Half-gallon and 4 Gallon jugs. Labels, Poly Bags, Jars and other Maple. Supplies.

Unbreakable Polyethylene Jugs are printed for Pure New Hampshire, Vermont, New York, Maine, Pennsylvania, Ohio, Virginia, and "all state" Maple Syrup - CUSTOM PRINTING, too.

See your
dealer
or write

BACON'S SUGAR HOUSE

JAFFREY CENTER, NEW HAMPSHIRE 03454

(603) 532-8836

DEALERS & ASSOCIATIONS CARRYING BACON'S JUGS

N. H. Maple Producers Assn., Warehouse: Rt 106, Loudon, NH	(603) 783-9961
Richard Moore, RFD No. 8, Concord, NH 03301	(603) 267-8217
R. N. Johnson, Walpole, NH 03608	(603) 756-3321
Massachusetts Maple Producers	
c/o Russell Davenport, Shelburne Falls, MA 01370	(413) 625-2866
Lesure Farm, Ashfield, MA 01330	(413) 628-3268
Donald Amero, W. Woodstock, Vt. 05091	(802) 457-3722
Clark Brothers, Wells, VT 05774	(802) 325-3203
The Dakin Farm, Ferrisburg, VT 05456	(802) 877-2936
Gordon Eurich Waitsfield, VT 05673	(802) 496-3869
H. W. Leach, Waterville, VT 05492	(802) 644-2488
Leader Evaporator Co., St. Albans, VT 05478	(802) 524-4966
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
Bill Kent, Jr., RD 1, Franklin, NY 13775	(607) 829-8262
Leo W. George & Sons,	(716) 591-1531
Rt. 77, Bennington, PO Strykersville, NY 14145	(716) 591-1766
Puszcz Brothers, Great Valley, NY 14741	(716) 699-2113
Claude Sisson, Sr., Central Bridge, NY 12035	(518) 234-3194
Ralph VanBrocklin, RFD No. 2, Canton, NY 13617	(315) 386-3036
John Wiggers & Son, 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 Producers Association	(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, Wisconsin 54408	(715) 449-2057
Steve Berman, Monterey, Virginia 24465	(703) 474-2902

LEADER

EVA CO.

MAKING

AAILABLE

Known for Quality
since 1888

PRODUCTS OF

Pipeline - Mapleflo / Lamb
Buckets - Galv. - Plastic

Tree Tappers - Gas & Electric

Aluminum Steam Hoods

LASTING

Finishing Units

Filter Tanks

ECONOMY

Cans — Cartons

Bacon / Kress Jugs

We at LEADER try to be a Complete

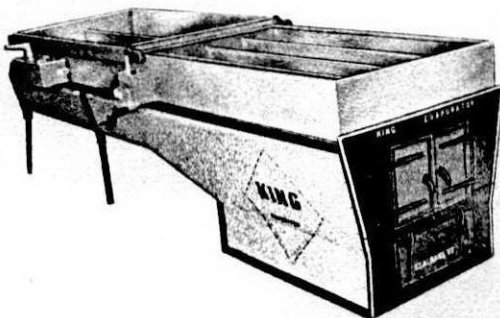
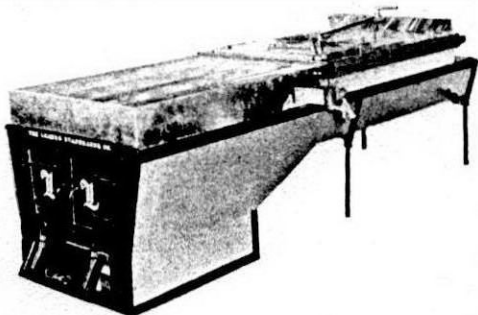


Continuous Service To The
Maple Industry

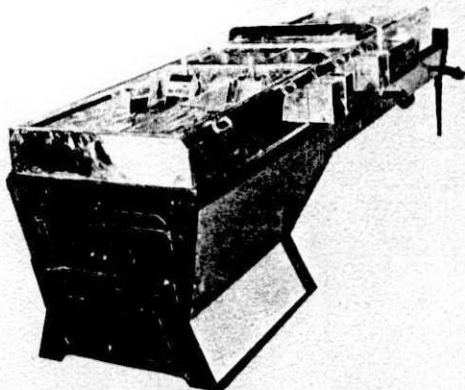
Tel. ac: 802-524-4966 or 524-3931

EVAPORATOR INC.

LEADER SPECIAL EVAPORATORS
MONITOR TANKS
WARNER SPOUTS



KING EVAPORATORS
KING TANKS
SOULE SPOUTS



VERMONT EVAPORATORS
VERMONT SPOUTS

Supplier to the Maple Producer.

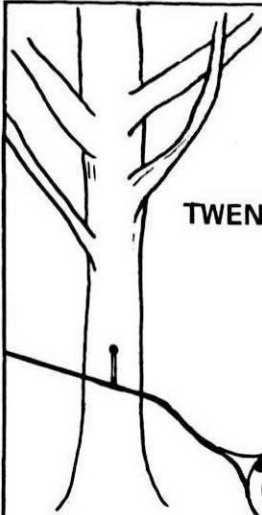
owned and operated by people interested in MAPLE to better serve
the MAPLE Producer — Contact us for all your MAPLE needs.

Leader Evaporator Co. Inc.

25 Stowell St., St. Albans, Vermont 05478

LAMB FOR QUALITY

TWENTY YEARS OF SATISFIED CUSTOMERS



• **Finest Quality Virgin Raw Material**

• **Resists Stretching Under Tension**

• **Maximum Flow Capacity - Smooth Interior Walls**

• **Best Holding Power On Fittings**

• **Ultraviolet Hastens Thawing**



Sap

Collected from "Lamb Tubing"
Is Cheaper - less gathering labor.

Sap

Collected from "Lamb Tubing"
Is Cleaner - less Bacteria and Debris.

Sap

Collected from "Lamb Tubing"
Produces larger yields -
Tubing will not collapse under vacuum.



Lamb Tubing Is Inexpensive - - - - -
When Cost Value is Based on Durability and Workability

R. M. LAMB, Box 368, Bernard's Bay, NY 13028, Phone 315-675-3652