

MAPLE SYRUP

DIGEST



Vol. 1A No. 4

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December 1989

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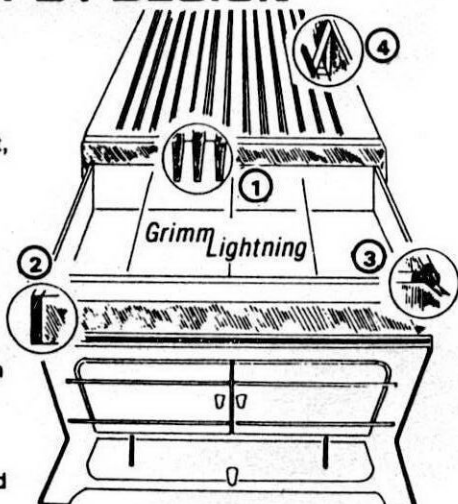
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MAPLE SYRUP DIGEST

Official publication of the
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MAPLE SYRUP COUNCIL

DIRECTORY

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EDITORIAL

In September I wrote the following letter which I intended to read at the North American Maple Syrup Council annual meeting this past October. Since I was unable to attend, Roger Sage read it for me and the directors thought it should be printed in the Digest.

FROM: Lloyd Sipple

To: The North American Maple Syrup Council Board of Directors, Members and Friends.

Exactly 28 years ago this month we held an executive meeting of the National Maple Syrup Council in a room at the Wausau Hotel in Wisconsin. It was the last day of the 2nd annual meeting and we were trying to decide what to do about publishing a news letter that we had been requested to do.

We had nothing to start with. No publisher, no editor, no reporters, no one to sell ads or write them, no mailing list to send it to and not even a newsboy to deliver it. We had one advertiser - Bob Lamb had promised to take the back page of each issue and any other space

that wasn't sold. I suppose I could have printed 50 pages and charged him with 40 but that wouldn't have been very nice.

Since there was little time left at the meeting to solve all these problems and no one had a quick solution, the directors laid it in my lap and said, "Here, Lloyd, see what you can do with it." I had just been elected president of the Council and I think they wanted to get even. So Mary Lou and I went home - Fred Winch was with us - and I guess we talked about it all the way there.

First of all, we (I use this term because Mary Lou has always been so much help in every thing I ever did) decided to attempt to publish a magazine instead of a news letter. We figured if it went broke it might as well make a big bang. I played the part of publisher, editor, reporter, photographer with Bob Lamb's help supplying equipment, and sold ads, with limited success in any of these departments and, with the help of the Extension Service, compiled a mailing list of some 4000 names to start with. With the help of Dr. Willits, who started the Council in the first place, Fred Winch, and a whole lot of others who furnished technical articles, we finally put out the first issue on January 1st 1962, and called it The Maple Syrup Digest. I don't think I did anything else that November and December and even left Mary Lou to take care of the Christmas trade.

The first issue was only 12 pages but we received enough good reports that we decided to print another in February. This was too close together so the third one went out in July and the fourth - October. For some reason we only printed 3 issues the next year but after that it's been 4 a year: Feb., June, Oct., and Dec.

We made many mistakes. Used some color but found it was too expensive. We thought we could send it to all producers free of charge and pay for it with advertising. This didn't work so we

SUBSCRIPTIONS

At the annual meeting in October the N.A.M.S.C. directors approved increasing the subscription rates effective Jan. 1st, 1990.

The new rates are:

U. S. - \$3.00 per year
2 years for \$5.00
Canada - \$4.00 per year
2 years for \$7.00
U.S. Funds

ERRATUM: The printer erred in setting up the SYRUP LAYERING AND DARKENING article in the October issue. As you finish reading on page 35 you must skip to page 37 and then go back to page 36. The charts are printed on page 38.

asked the readers for contributions instead of paid subscriptions. This worked to some extent but 2 years ago we finally went to a paid subscription system. Some years we made money, others we lost some. We started with nothing and finally built the bank account up to about \$10,000 working capital.

The first year I was paid nothing for doing it and then the Council started paying me about \$100 an issue. I now do it on contract for \$800 an issue which, I think, would amount to about \$2.00 an hour if I kept track of all the time it takes.

We have no paid employees which has eliminated the expense of a payroll, Social Security, Withholding, Workman's Compensation and Disability Benefits. Any profit ever made is right there in the bank account. The Digest is truly a non-profit business although that wasn't necessarily the intention of the publisher.

I have always thought the Digest should make a little money or at least break even. That's why we never used glossy paper or full color covers. We couldn't afford it. We couldn't print a lot of editorials or technical articles unless we sold enough advertising to pay the cost. We have never paid for editorials or photographs and although it took an issue or two sometimes we have always managed to print all articles of this nature that have been submitted. Postage has been going up almost every year and now costs about \$1200 an issue.

The Digest has lost money the last two years but not an amount that couldn't be covered without depleting the bank account. This loss is because we didn't increase the cost of advertising as soon as we should have, printing and postage costs are increasing, computer costs are much higher because of the paid subscriptions and the subscription rate hasn't ever been increased. Advertising rates were increased last January and we would like to raise subscriptions from

\$2 to \$3 a year, \$4 in Canada. This should be adequate, at least for the present.

I could keep on going but I've covered the important points. I can give more details later when necessary.

The past 28 years have been a rewarding experience to me. I felt I was able to do something for the maple industry. I knew nothing about the publishing business when I started but the Digest was small and I could learn as it grew. We both tried to do the best job we knew how to do. This has all been good news. Now for the bad news, at least from my standpoint.

It's time for someone else to take over the Digest. I hope this will be an easy change but I'm afraid it could be quite complicated. I'm quite sure this is not the right time for it because the next 2 issues are close together and the syrup season isn't far off. I think the best time for an "orderly transition" would be in the summer before the October issue.

Therefore, since there won't be another meeting of the Council before next September, I will submit my resignation now, effective immediately or as soon as a replacement can be found. If necessary, I will put together the December, February and June issues but under no circumstances will I continue on after September 1st, 1990.

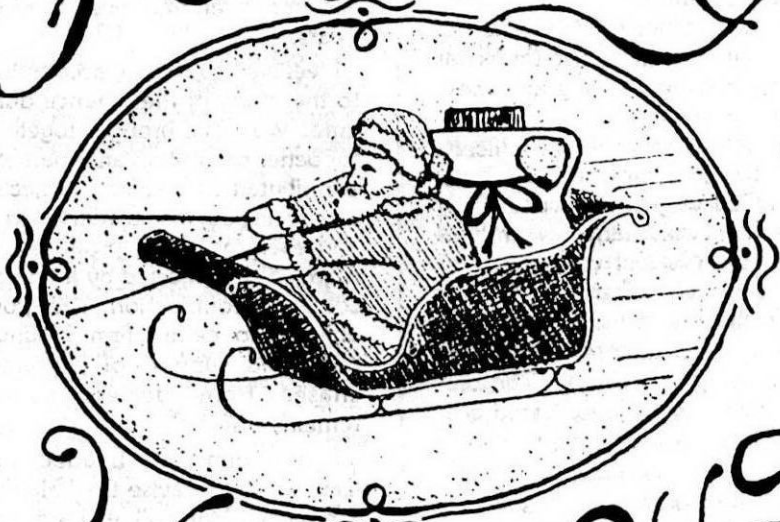
Respectfully submitted

Lloyd H. Sipple

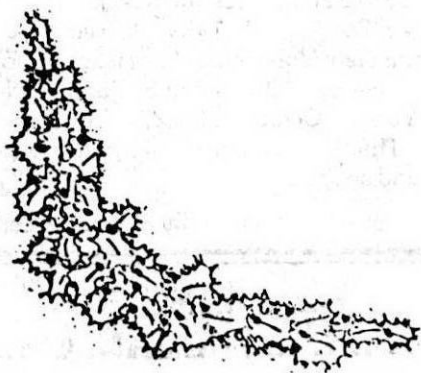
P.S. Since my recent illness, I must add one condition to this agreement. I warn everyone I will in no way allow any abuse of the deadline for each issue which has caused me so much "stress" in the past. Any material or advertising not received by the deadline will not, under any circumstances, be included in that issue.

wishing
you...

Happy



2 HOLIDAYS



sugarhill
MAPLE CONTAINERS

FROM WISCONSIN THANK YOU MAINE

Wisconsin Maple Producers enjoyed beautiful fall colors and wonderful warm weather on their trip to the N.A.M.S.C. meeting at South Portland, Maine. Everyone is commenting on the friendly warm hospitality which you Maine folks displayed. It truly was a memorable time for us. A great learning experience as well as a lot of fun. Your programs were so well organized.

Thanks are in order to Mr. Merle our past president, who in his two terms has kept our organization strong and moving ahead.

Congratulations to our new officers, Bill Clark, Pres.; Lynn Reynolds, Vice-pres.; and Carl Vogt, Sec.-Treas. They will have to deal with many new and important issues. We feel very confident with people of such caliber.

Although this was a wonderful meeting, there was definitely someone missing, we all felt it immediately. The presence of our beloved editor Lloyd Sipple would have made this meeting complete. Lloyd Sipple and the Maple Digest from the very beginning of this council has been in so many many Maple homes in North America furnishing us Maple people with so much information over the many years of service, we will always be indebted to Mr. Sipple. The Nominating committee sought Roy Hutchinson a very capable man to help lessen the burden during your convalescence. Mr. Sipple we are all hoping to see you at the next convention in New York, so follow Doctors orders for a full and speedy recovery, remember we all love you and are deeply concerned regarding your health.

Again Thank-You Maine for a great convention we can hardly wait to be back. Hurriedly submitted for deadline

by Roland Jorns,
Delegate of Wis.

FROM THE PAST PRESIDENT



As past president of the North American Maple Syrup Council I would like to take this opportunity to thank each and everyone connected with the Council, as well as all members of the various maple syrup associations, for the superb support given me over the past two years.

I feel we have many accomplishments to the credit of the Council during this time. We have brought together ideas for better promotion and marketing and contributed to research projects which are helping the maple industry as a whole and each individual producer. Our research fund collected by a one cent per container contribution, has grown and appears to be on firm footing. Your continued support of container purchases from dealers contributing remains essential.

The committee, headed by Russ Davenport, to revise the "Maple Syrup Producers Manual" is hard at work. Rough drafts were presented at the committee meeting held in Portland.

Thanks to the State of Maine Maple Producers for a fine program and all the ingredients that went into the very enjoyable and successful meeting on October 26, 27, 28, 1989. As secretary of the New York State Association, I hope to see you all in 1990 at Batavia, New York on October 21, 22, & 23.

Thanks again for your participation and support.

by Arthur E. Merle

DEADLINE FOR FEB. ISSUE JAN. 4th.

GREETINGS FROM THE PRESIDENT

It's perhaps hard to realize that we have just concluded the THIRTIETH annual meeting of the North American Maple Syrup Council. Can it be that many years?

The warmth of Maine Maple Producers hospitality was only equalled by the warmth of the sun shine and beautiful summer weather they provided us with, leaving us all with a memorable "Maine" experience. On behalf of the North American Maple Syrup Council, our thanks to the Maine Maple Producer's Assoc. in the fine hosting of our 30th event. It was good to see some old faces again such as Elmer & Mary Kress and Ed Curtis.

Notably among the missing was Lloyd Sipple. Word had it that some health problems had kept him and Mary Lou home.

It was the letter that Lloyd sent along to be read that emphasized the passage of time. It stated in part that after more than 28 years as editor of the Maple Syrup Digest, he felt in the course of the next year he should step down and that the Council should proceed to select a new editor. I believe this information took most folks by surprise and with a note of sadness. There was suddenly the awareness that 28 plus years was a long time.

Lloyd was asked to put together a maple news letter in the beginning by the council. He felt a magazine would be more worth while and hence proceeded to create "The Maple Syrup Digest." The Maple Industry owes Lloyd and Mary Lou a great debt of thanks for their dedication and success in creating and maintaining the Maple Industry's first national publication.

I understand Lloyd is printing the letter he had presented to the Council in this issue. It relates, in more detail, how the

Digest got started, how it has kept going it's trials and tribulations and little anecdotes along the way. After all, a lot of you out there probably weren't even sugaring when this magazine started.

In view of the above and at the request in Lloyd's letter, the Council took quick action in appointing a new editor. While there were several offers, the bid went to Roy Hutchinson of Canterbury, NH. Roy has considerable experience in this field and felt he has time to do it. We welcome Roy to his new job and I'm sure he would be glad to hear from any of you on ideas you might have for future Digest issues.

Also at the Portland conference, Lynn Reynolds stepped down as Sec.-Treas. of the Council. Our gracious thanks to Lynn for the outstanding job that he has done these past several years. He will continue as treasurer and overseer of the North American Maple Syrup Council Research Fund. Thanks, Lynn. Lynn was also elected the New Vice President of the Council.

We also welcomed Carl Vogt of Minnesota aboard as the new Sec.-Treas. of the Council. Best wishes, Carl.

Sincere thanks also goes to retiring president Arthur Merle for his dedicated service to the Council and as president these past two years.

By the time you read this it will be mid December, so it's time to wish everyone a most memorable Christmas and Happy New Maple Year.

Sincerely, Wilson "Bill" Clark

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Just in case you're interested - -



For years I tried to find a picture of the first sap gathering rig I ever used. Jack Eldred located it in his mother's belongings. He's the good looking guy on the right. I'm the silly looking kid on the left.

Jack lived with his folks on a small farm across the road and we tapped roadside trees on both places. We needed something to haul sap with so we rigged up this cart with a milk can and put Brownie, Jack's big brown dog who loved to pull, to use. This was about 1935, I was 13 years old, and probably had more fun making syrup that year than I ever have since.

Lloyd Sipple



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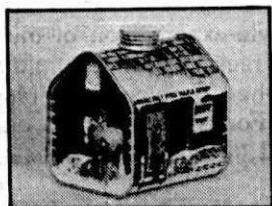
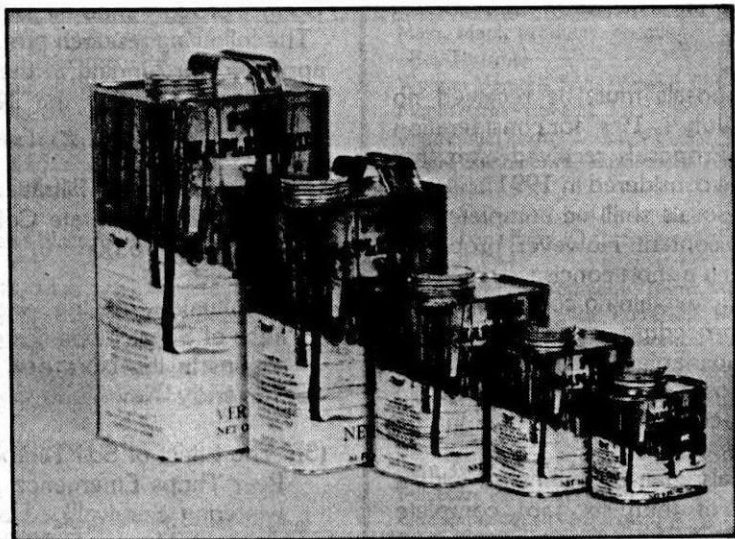
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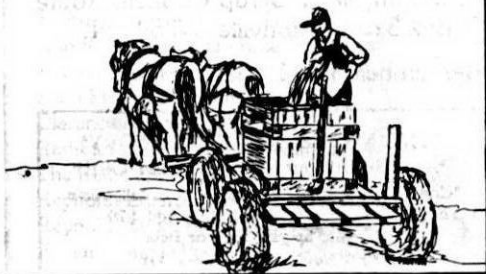
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Research projects may be submitted for consideration based on the following guidelines:

(1) Proposals must be received no later than July 1, 1990 for consideration in 1990. Proposals received after that date will be considered in 1991.

(2) Proposals shall be complete and detailed in content. However, proposals shall contain a short concise cover statement briefly explaining cost, scope, objective, procedure, and anticipated value to the maple industry.

(3) Proposals shall contain detailed estimated cost breakdown, within the detailed report.

(4) Proposals shall be submitted with a minimum of thirty-six (36) complete copies.

(5) Proposals must contain a complete reference section listing and explaining any similar or duplicating research previously accomplished. Proposals for duplication of previously completed research must contain detailed explanations of why such duplication is warranted.

(6) Results or progress of funded projects must be presented annually at the convention of the NAMSC and must be published in the Maple Syrup Digest as soon as possible after completion.

(7) Send proposals to: Lynn H. Reynolds, Research Committee, North American Maple Syrup Council, Route 2, Box 326, Hortonville, WI 54944.

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The North American Maple Syrup Council proudly announces:

The following research proposals were approved for funding at the 1989 annual convention of the NAMSC in Portland, Maine:

- (1) "Pre-evaporative Filtration of Maple Sap" - Buffalo State College, New York - \$5,000.00
- (2) "Evaluation, Testing, and Maintenance of Sugar Maple Progeny Plantations in the Northeast" - Cornell University, New York - \$6,000.00
- (3) "The Effect of Soil Temperature on Pear Thrips Emergence and Overwintering Survival" - University of Vermont, Vermont - \$9,000.00
- (4) "Re-examination of the Effects on Trees of Using Paraformaldehyde when Tapping Sugar Maple" - U.S. Forest Service, Connecticut - \$1,000.00

1989 Contributions to the NORTH AMERICAN MAPLE SYRUP COUNCIL RESEARCH FUND

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Alstead Farms - Keene, NY

American Maple Products - Newport, VT

(Mr. Roger Ames)

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 (Mr. Nathan Danforth)
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 Charles Emerson - Alfred Station, NY
 Ed Eurich - Waitsfield, VT
 Everson's Pure Maple Syrup - Clifton Springs, NY
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 Family Farm Maple Products - Van Etten, NY
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Townsend's Sorghum Mill - Jeffersonville, KY
25,000 Gifts, Inc. - White River Junction, VT
Truchans Maple Syrup - Lansing, MI
United Maple Products - Delta, Ontario
Vermont Sugar House - South Royalton, VT
Waterloo USA - Barton, VT (Mr. Bucky Shelton)
Watts Regulator Co. - Franklin, NH
Mr. & Mrs. Warren Wells - Nassau, NY
Wisconsin Maple Syrup Producers Council -
Holcomb, WI (Henry Grape)
Wood Homestead Maple Syrup - Stamford, NY
James Woodrow - Herman, NY
Wright's Sugar House - Camden, NY
Dale Young - Granby, CT

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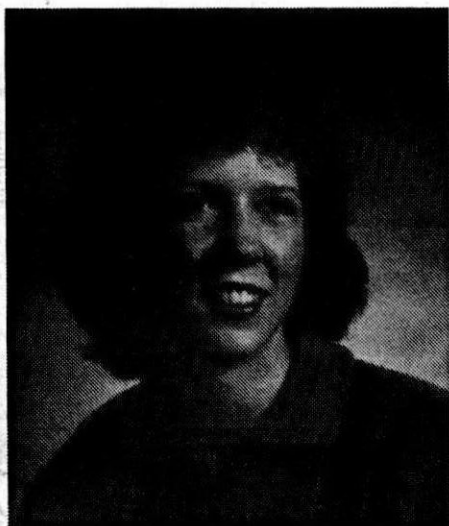
WISCONSIN MAPLE PRINCESS

Hi! I am Karen Kakes, the 1989 Wisconsin Maple Princess. I was crowned on May 28th at the annual Maple Festival at Reynolds sugar bush in Aniwa.

I am from Bryant, Wisconsin, where my parents, Don and Mavis Kakes along with my sister Penny and I are maple producers.

I am currently a sophomore at the University of Wisconsin Stevens Point where I am majoring in English and Secondary Education. I am active in a variety of school activities including Hall Council Secretary, tutoring, intramurals, and pep band. I have been very active in the Langlade county 4-H program and am currently an adult activity leader.

During my past months as Maple Princess, I have attended Wisconsin Farm



Progress Days, the Wisconsin State Fair, the fall producers tour and various parades.

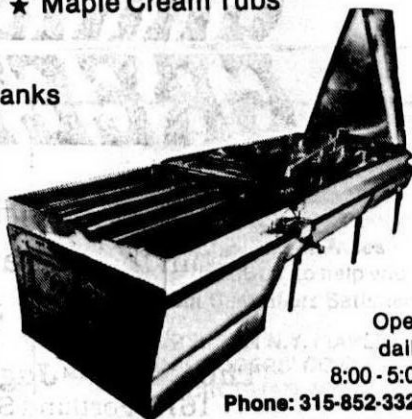
I am greatly looking forward to representing the maple industry during the upcoming months.

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TRACEY DENGLE SELECTED STATE MAPLE SWEETHEART

Tracey Dengler of Saegertown, daughter of Charles & Judy Dengler, was selected to represent Pennsylvania as the 1989-90 Pennsylvania Maple Sweetheart at the 1989 State Maple Tour held at Waymart, Pennsylvania, on September 29-30, 1989.

The candidates competing for this recognition were 1989 Maple Queens chosen in the various maple regions in the state. Tracey Dengler represented the Northwest Region; Lara Hershey, Potter-Tioga Region; Mary Jamison, Northeast Region, and Tracey Cook, Endless Mountains Regions.

Contestants were judged on appearance, speaking ability, poise, personality and maple industry knowledge in both production and usage. In addition each contestant had to make a two-minute presentation on how she might promote the maple industry and each candidate was interviewed by the three judges.

Tracey Dengler is a senior at Saegertown High School and is very active in girls' volleyball, statistician for boys'

basketball, Ski Club and Spanish Club. Other outside activities include a Candy Striper at Meadville Medical Center, volunteer with the Meadville Community Theater, and is active in the Crawford County 4-H program with projects in sheep and dairy. She is active in 4-H Interstate Exchange and held such offices as president of the Blooming Valley 4-H Club for two years, secretary for two years, treasurer for one year and news reporter for four years. Upon graduation from high school, Tracey plans to attend the Penn State Behrend Campus and major in agricultural economics or agricultural engineering. Tracey gained her knowledge of the maple industry by helping to make maple syrup on their family farm. She has many years of hands-on experience in maple syrup production.

As Pennsylvania Maple Sweetheart, Tracey will represent all the state's maple producers and promote maple at the 1990 Farm Show held in Harrisburg on January 7-12, 1990 and other state and local functions.

This program is sponsored by the Pennsylvania Maple Syrup Producers' Council for the promotion of the maple industry.

Joseph S. Beard



***Warmest Holiday Wishes
to all our maple friends***

The Reynolds Family

SEVENTH ANNUAL IOWA MAPLE SYRUP FESTIVAL SET

Although many Americans don't associate maple syrup with Iowa, the Hawkeye State's trees produce good quantities of maple sap, and increasing numbers of landowners are making syrup.

On March 3 & 4, 1990 the Indian Creek Nature Center in Cedar Rapids will hold its Seventh Annual Maple Syrup Festival. Several thousand visitors are expected to view syringing demonstrations and enjoy a breakfast featuring Iowa maple syrup.

Over the years syringing demonstrations held at the Nature Center have encouraged Iowans to try their hand at syrup making. In addition to the festival syringing demonstrations are held throughout March.

For information contact Rich Patterson, Director, Indian Creek Nature Center, 6665 Otis Road SE, Cedar Rapids, Iowa 52403. The phone number is (319) 362-0664.

VERMONT MAPLE MEETINGS

Tentative Schedule

- Jan. 3 , Wed. - Orange Co.
- Jan. 4 , Thur. - Addison Co.
- Jan. 5 , Fri. - Washington Co.
- Jan. 9 , Tues. - Rutland Co.
- Jan. 11, Thur. - Windham Co.
- Jan. 12, Fri. - Windsor Co.
- Jan. 15, Mon. - Caledonia Co.
- Jan. 16, Tues. - Lamoille Co.
- Jan. 17, Wed. - Orleans Co.
- Jan. 18, Thur. - Franklin Co.
- Jan. 18, Thur. - Evening Chittenden Co.
- Jan. 23, Tues. - 11:00-4:00 Annual Meeting Vermont Maple Sugar Makers Assoc.
- Jan. 23, 24 & 25 Vermont Farm Show



Iowa Governor Terry Branstad inspecting an evaporating batch of maple syrup at the Indian Creek Nature Center. To his left is syruper George Pederson of Cedar Rapids. Photo Credit: Bob Jones

Tentative Agenda - 1990 Maple Schools

Jan. 11	Allegany Co.	Paul Westfall (716/268-7644)	Almond Grange Almond	10 am-3 pm Cost luncheon
Jan. 12	Chautauqua Co.	Andy Dufresne (716/664-9502)	Ross Grange Hall Main St., Falconer	10 am-3 pm Cost luncheon
Jan. 13	Wyoming Co.	Steve Childs (716/786-2251)	N. Java Fire Hall Rt.98, N. Java	10 am-3 pm Cost luncheon
Jan. 16	Cortland Co.	Michael Baker (607/753-5077)	Cortlandville Gr. Rt. 228 & Rt. 222 Cortland	10 am-3 pm Cost luncheon
Jan. 17	Chenango Co.	Eric Schimke (607/334-5841)	Un. Methodist Ch. N. Br. St. Norwich	10 am-3 pm Cost luncheon
Jan. 18	Delaware Co.	Dean Frazier (607/865-6531)	Contact Co. for further information	
Jan. 19	Otsego County	Janet Aldrich (607/547-2536)	Pierstown Grange Hall Rt. 28 Pierstown	10 am-3 pm Cost luncheon
Jan. 23	Lewis Co.	Pat Beyer (315/376-5270)	Contact Co. for further information	
Jan. 24	St. Lawrence Co.	Steve VanderMark (315/379-2311)	Canton Public Library Park St. Canton	10 am-3 pm No luncheon
Jan. 25	Clinton Co.	Beth Spaugh (518/561-7450)	Miner Institute Auditorium Chazey	10 am-3 pm Cost luncheon
Jan. 26	Warren/ Washington Co.	Laurel Wells (518/623-3291)	Mohican Grange Rt. 9L (Ridge Road) Oneida Comers, Queensburg	10 am-3 pm Cost luncheon

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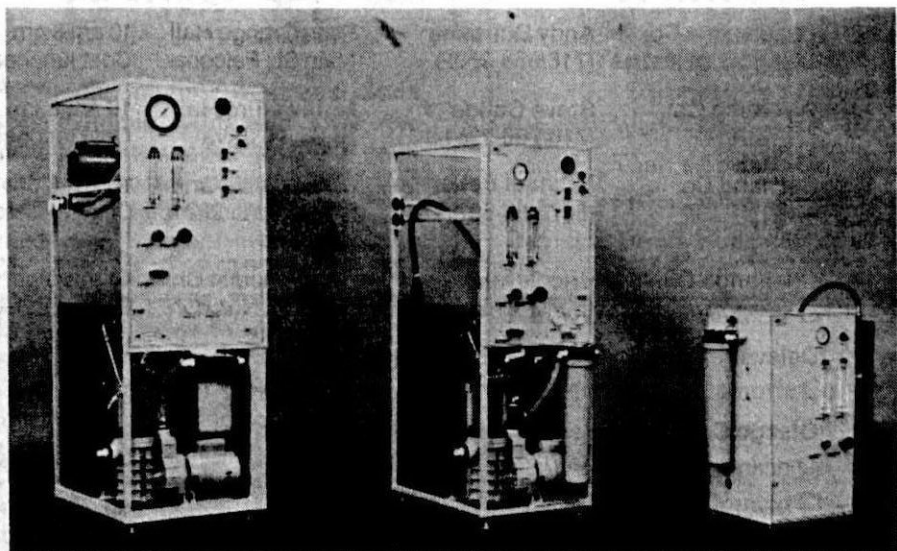
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MAPLE SURVEY

by Jack Erway

Penn State Extension Agent

Questions:

1. Have you ever watched maple syrup being made?
2. Do you buy syrup by color?
3. Can you taste the difference between A & B? If so, which do you prefer?

This consumer opinion survey was conducted at the Maple Festival in Couderdport on May 5 and 6, 1989. During the two day festival 112 persons tasted and answered the above questions giving their opinion and preference. The purpose for the survey was also to educate people as to the maple syrup making process.

The results of the survey were as follows:

Question 1.

67 or nearly 60% had made syrup or were familiar with the process while 45 or slightly more than 40% had never watched the process.

Question 2.

37 or 33% said they purchased maple syrup by the color, while 73 said they did not. Many comments were that you cannot see it anyway in the jugs available.

Question 3.

Two samples of syrup were used in the taste test.

A - Was fancy light syrup made with modern technology -- reverse osmosis, sap filtered and ultra-violet light on the sap to kill the bacteria.

B - Was a light fancy syrup made the conventional way. The evaporation process completely through the evaporator. Both syrups were Top Grade.

Results. 100 people or slightly more than 89% said they could tell a difference, while 11% said they could not tell any difference in the two samples.

When asked which they preferred, 46 said they preferred A and 47 said they preferred B. - 3 said there was no difference, they liked both. Most said they were both good.

One person said "A" was buddy and one person said "B" was buddy.

One person made the comment that if she had known "B" was boiled the old-fashioned way she would have picked "B" rather than "A".

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THE CATHEDRAL OF GOD

BY

Gordon Feindel

In God's Cathedral I walked that day
While the trees lifted their arms to pray.
In the Cathedral of God alone I stood
For the occupants were made of wood.

Made by the Creator's skillful hand
United and tall together they stand.
Caressed by the wind and kissed by the
rain

With nothing to lose and all to gain.

The cardinal in his choir loft high
Sang his solo in the deep blue sky.
The red head with his rapid tat-to
Sounded his gavel and we all knew

That all was right with God that day
While the trees lifted their arms to pray.
I said, "Dear Lord, it seems to me
If I would be as humble as this stately
tree,

What must I do to fulfill thy will?"
And a small voice whispered, please be
still

And listen to your Master's Holy Will.
And again the voice spoke, come win or
lose.

I have given man the power to choose.
The way he goes and the pathes he trod
To the abyss below or ascends to God's
higher plain.

He will always find me there if he seeks
me in earnest prayer.

For it is plain as you can see

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Man is of much more value than this
stately tree.

My head was bowed as I left that day
The Cathedral of God while the trees
they prayed.

For though my Christ, on a wooden
cross was hung,

He was a carpenter's son.

And as he hued and molded these
stately trees

He will mold our lives if we will come
With humble hearts and devoted lives
To our Eternal home.

Gordon Feindel is a maple producer in Tiffin, Ohio. He sent this poem to us some time ago and this is the first chance we've had to fit it in. We apologize for the delay but thank you, Gordon, for sending it.

Ed.



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FRED WINCH SUGAR MAPLE TREE DEDICATION

Fred E. Winch, Professor Emeritus, Department of Natural Resources, Cornell University, was honored on 6 October 1989 with the dedication of a sugar maple tree planted on the front lawn of Fernow Hall on the Cornell campus. The maple tree, provided by Fred's children, was presented to the College of Agriculture and Life Sciences in recognition of Fred's many years of teaching and extension work in the College's

sugar maple program.

Dear David L. Call and other dignitaries of the College were present to accept the tree for the College and to acknowledge Fred's accomplishments and valuable service.

This was a happy occasion at which to visit with the Winches and to reminisce about the "good old days". Bob and Florence Lamb were present representing the New York Maple Industry. Dr. John Kelley had the privilege of poking a little fun at Fred by reading to those assembled, a poem "Twenty Years In A State Institution" written by Lloyd Sipple and published 24 years ago in the National Maple Syrup Digest.



Left to right - Fred Winch, Mrs. Fred Winch, Mrs. Dan Winch, Dean David Call and Dan Winch - Photo by David Taber

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1989 NORTH AMERICAN MAPLE SYRUP COUNCIL CONVENTION

"A Convention as Refreshing as a Breeze through
the Pine Trees"

by Lynn H. Reynolds, Secretary, NAMSC

The Maine Maple Producers Association were gracious hosts for the 30th annual convention of the North American Maple Syrup Council. The convention was held October 26-28, 1989 at the Sheraton Tara Hotel, South Portland Maine.

The convention started on Thursday with the equipment manufacturers and dealers setting up their displays. The displays were extensive and enjoyed by all during the entire event. Registration started at noon with the afternoon spent by most getting re-acquainted with old friends. It did not take long for new maple folks to get acquainted with those that were already there. Maple people are the most friendly and friendships start, flourish, and endure with each passing maple gathering. A director and alternate meeting was convened promptly at 5:00 pm. The meeting lasted approximately an hour. Discussions for familiarizing the delegates and alternates of the contents of the research proposals were the main focus of business. The board was advised of

the status of the research fund. Since the meeting was not formally called to order, no business was conducted.

Thursday evening officially launched the 30th annual convention which would provide all of us with information, entertainment, and camaraderie in abundance for the next three days. The Maine Maple Producers Association sponsored an "Icebreaker Buffet" which was delightful. This set the tempo for a delightful food experience which can only be a tribute to the cuisine of Maine. A slide presentation exhibiting Maine in all its annual splendor was shown along with an entertaining dialogue. It truly was an enjoyable evening.

From beginning to end, food was a highlight. Bountiful tables of delicious and delightful food were served throughout the convention. Good food, friendship, and entertainment were enjoyed by all.

Serious business began on Friday morning. A warm welcome was extended to the attendance of the convention by Mr. Bernard Shaw, Maine Commissioner of Agriculture. This was followed by a welcome from Maine Maple Producer's president, John Hodgkins and by NAMSC Delegate Robert Smith. We certainly felt welcomed to Maine. The NAMSC President, Arthur Merle extended his appreciation to Maine and his welcome to the various Provincial and State Delegates.

Roll call confirmed that all 14 States and Provinces were properly represented on the Council. The normal business of Secretary-Treasurer reports indicated the past meeting minutes were in order and that the financial condition of the Council was stable and viable. Again this year, the progress of the Research Fund of the NAMSC was probably the most dramatic event. The balance of the fund has increased to over \$42,000.00. All in attendance expressed their optimism towards the success and the continued growth of this very important maple project. The auditing committee

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determined all financial accounts to be accurate and in order.

For 30 years, crop reports have been a highlight of the Council meetings. 1989 certainly was no exception. All listened intently to the production reports as well as the various activities conducted in the name of maple by the Provincial and State Maple Associations. The maple season seemed to be varied. However, a general consensus seemed that the Southern areas experienced a poor to fair production, while the northern production was good to excellent. Many states and Provinces reported excellent crops. Northeastern Canada appeared to have an all time record in some areas. Certainly a significant surplus of syrup exists in Quebec. In general, the season came late last year. The quality was reported excellent with very little commercial grade even produced. With syrup available, the enthusiasm for festivals, pancake feeds, parades,

maple queens, fairs, expositions, and other maple promotions was at an all time high. Maple products were reported to be moving well, price is good, and there is certainly enough syrup around for all of us to launch an outstanding marketing program. The general attitude of those in attendance was that we would do just that.

The one sad note of the convention was that Lloyd Sipple, Editor of Maple Syrup Digest and a dear friend to all of us, was unable to attend the convention due to severe illness. Because of this illness, Lloyd has decided to resign as editor of the Digest. We shall all miss his dedication to the Digest as well as his life long contribution to the NAMSC. We all wish Lloyd well and hope to see him back at the meeting next year. Roy Hutchinson of New Hampshire has agreed to be the editor of the Digest. We all like Roy and know he will provide us with the same dedication to the Digest we have received from Lloyd over the years. Our thanks to both Lloyd and Roy.

The Maple Syrup Digest report was presented by Roger Sage. Roger read the letter of resignation from Lloyd Sipple which requested that the dues for the Digest be increased. The Council took immediate action to raise the subscription rate for the Digest by \$1.00 per year.

Juan Reynolds, President of the International Maple Syrup Institute reported

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and

laughter

...and

saying

"thank you"

to all

those you

hold

dear.

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on the progress of the organization. The IMSI held their annual meeting in Levis, Quebec on October 21 & 22, 1989. This was the weekend just prior to the NAMSC meeting in Portland. Many maple persons were able to attend both meetings because of the timing and the geographical proximity of the two meeting locations. The IMSI meeting was well attended and the focus of the meeting centered on the surpluses of syrup that exist in Canada. It is estimated that a surplus of 25 to 30 million pounds of syrup may be in storage at the time of next year's maple crop. The IMSI supports all of the research and efforts to combat acid rain, pear thrips, and maple decline. However, the IMSI now feels that it must concentrate all of its efforts and resources towards marketing which hopefully shall relieve the enormous surpluses now existing. Juan reported that a cooperative research project between the IMSI and the Canadian Government has just been completed. It is anticipated with the results of this research that packers and producers can better target their new uses of maple syrup towards the preferences of the consumer. More projects are being planned. It is the intent of the IMSI in cooperation with the NAMSC and all other maple organizations to design, create, and implement marketing data which shall significantly increase the use of pure maple products.

A final report on the "Maintenance of Vermont Sugar Maple Clonal Seed Orchard" was presented by Peter Garrett, Research Geneticist, U.S. Forest Service, Durham, New Hampshire. Peter related that the maintenance of the clonal seed orchards were proceeding in a positive manner. Concentration is being given to things like mowing, pruning, thinning, and other normal forestry practices. The priority is to provide adequate growing space for maximum crown development on the trees we have decided to leave in the orchard.

Saturday morning was led off by Sandra Wilmot reporting on the final research results of "A Mechanized Soil Extraction System for Determining Population Densities of Pear Thrips in Sugarbushes". Sandra presented a series of slides to demonstrate the procedure of removing the thrips from the soil. Great strides were achieved in development of mechanization to speed up the process of determining the numbers of these thrips. Much work remains to be done, but the assistance of the NAMSC Research Fund has been instrumental in development of more sophisticated and higher technological equipment for this purpose.

Aubrey Davis, State Statistician, New England Agricultural Statistics, Concord, New Hampshire reported on the status of the crop reporting service for the U.S. maple syrup industry. The proposal for crop reporting is for Maine, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Vermont, and Wisconsin. The favorable proposal has passed committee and is

currently in the Office of Management and Budget for the purpose of funding. The National Agricultural Statistics Service anticipates there could be some problems, but remains optimistic for re-instatement of this so needed service.

Sandra Wilmot, Pear Thrips Coordinator, Vermont Department of Forest, Parks, and Recreation gave a short update on the pear thrips infestations. She also gave a complete report during the afternoon technical sessions. Her discussion included a history of the insect, its evolution of expansion in North America, status of research progressing on the thrips, and proposed possible controls which may be introduced. Sandra showed slides which examined all of these aspects of the thrips problem. Sandra concluded by stating, "we know more, but still have many unanswered questions".

A committee report by Lynn Reynolds concerning the status and progress of the Research Fund was highly optimistic. A list of known contributors was read with certificates awarded to those

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persons and companies at the Banquet Saturday evening. It was obvious that those contributing deserve all our thanks. It was further obvious that thousands of maple producers are contributing and also should be given recognition. It should be noted that the same appreciation goes out to all of those contributing that have not yet been recognized. The fund is working, is healthy, and is providing the seed money necessary to initiate research projects of great significance to the maple syrup industry of North America.

The Research Review Committee recommended four research projects to be funded during the 1990 year. The Council voted to accept those recom-

mendations. The projects approved are (1) "Pre-evaporative Filtration of Maple Sap" - Buffalo State College, New York - \$5,000.00; (2) "Evaluation, Testing, and Maintenance of Sugar Maple Propagation Plantations in the Northeast" - Cornell University, New York - \$6,000.00; (3) "The Effect of Soil Temperature of Pear Thrips Emergence and Overwintering Survival" - University of Vermont, Vermont - \$9,000.00; and (4) "Reexamination of the Effects of Trees of Using Paraformaldehyde when Tapping Sugar Maple" - U.S. Forest Service, Connecticut - \$1,000.00.

The Maple Syrup Producers Handbook is being rewritten. Russ Davenport, Chairman of this committee reported that the

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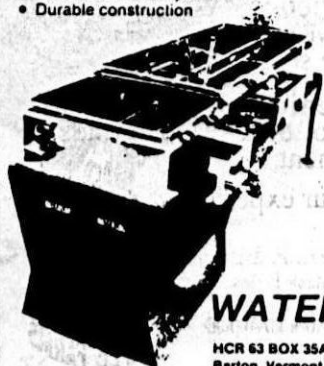
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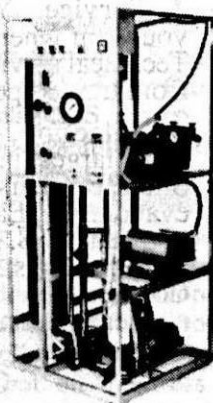
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authors of the various chapters have been designated and that most rough draft outlines are already completed. A resolution was passed by the Council authorizing up to \$5,000.00 for travel expenses involved in completing this so needed publication. The authors of the various chapters to be produced in the new manual reads like a "Who's Who" in maple. Everyone is anticipating a spectacular and useful maple tool.

Bruce Martel, Chief of Investigations, Vermont Department of Agriculture, was unable to give specifics as to the progress on prosecutions involving those who have adulterated maple syrup. However, he felt major breakthroughs were forthcoming which would end those which are flagrantly abusing the purity of our so valued product. We were all in support of Bruce's efforts and are elated that action will take place to protect pure maple.

The Council passed a resolution supporting an effort to reduce or eliminate the 35% tariff which Japan currently charges on the import of pure maple syrup into their country. The resolution was requested by Peter Stransky who will pursue the legal channels necessary to lobby the Canadian and U.S. Governments to assist in eliminating this unfair tariff.

General discussions were held concerning the ASCS drought payments. The Council took no action and expressed no opinions concerning the payment or non-payment of such programs. Discussion concerning the abandonment of the tap hole pellet was held. Again, the Council expressed no opinion or endorsement of the use or non-use of this item.

Locations for future meetings are established for Batavia, New York in 1990, Wisconsin for 1991, and Ohio for 1992.

Elections were held. The following are the Officers and Members elected: President - Wilson "Bill" Clark - Vermont

Vice President - Lynn Reynolds - Wisconsin

Secretary/Treasurer - Carl Vogt - Minnesota.

The following Life Members were added this year:

Ed Curtis - Pennsylvania

Dr. Maria Franca Morselli - Vermont

The following Associate Members were elected this year:

Lewis Staats - Extension Specialist, Cornell University

Jean-Pierre Potvin - Quebec Dept. of Agriculture

Dr. Claude Hills - Consultant, Pennsylvania

Gilles Croteau - Retired Manager, Plessisville Co-Op, Quebec

Claude Tardiff - Sales Manager, Plessisville Co-Op, Quebec

Steve Selby - Small Bros. Evaporator Company, Quebec

John Conde - Forester, New Hampshire

Andre LaPrade - Maple Containers, Vermont

Dr. Melvin Tyree - Research, U. of Vermont

Sherb Doubleday - Retired, American Maple, Vermont

Arthur Merle - Past President, NAMSC, New York.

Past conventions set a precedent for informative technical presentations. Maine certainly continued the tradition. The Technical presentations were interesting, varied, and informative. We were treated to this technical session with host John Hodgkins introducing the various presentations. And presentations they were!! Dale Jeffrey gave two slide presentations concerning the history and eight years experience with the pear thrips. Lew Staats provided us with a most interesting update on the sweet tree program. He concluded "that with proper maintenance and evaluation, the sugar maple plantations can provide a means to protect a large investment and serve a major role in sugar maple tree improvement". Cheri Moen, Marketing Specialist, Augusta,

Maine described "Maine Maple Sunday". This 4th Sunday in March annual event involved over 100,000 persons in a maple promotion. Certainly this type of promotion is exactly what the industry needs to sell syrup. Maine deserves congratulations for this effort. Presentations by Richard Dearborn and Dave Struble on Maine diseases and insects were informative. Overall, the technical presentations were superb.

Considering the list of technical presentations, the tour of the Portland Harbor, the business sessions, and the hospitality, this was one great-great convention. But the fun was yet to come. The banquet was a true finale to a great festivity. Bob Lamb, graciously as always, presented two awards to Arthur Merle as past President and to Lynn Reynolds as past Secretary-Treasurer. Both awards were sincerely appreciated. Our continued thanks to Bob and Florence.

Awards were given for the best syrup as a result of the Maine sponsored syrup contest. Winners were:

Light Amber - Massachusetts Maple Products, Ashfield, Massachusetts

Medium Amber - Zubell's Sugar Shack, Gilman, Wisconsin

Dark Amber - Zubell's Sugar Shack, Gilman, Wisconsin

Best of Show - Robert Smith, Smiths Maple Products, Skowhegan Maine.

Awards were also given for the best photo contest. Winners were:

1st Place - Shirley Stockwell, Ellsworth, Wisconsin

2nd Place - Edward Doubleday, Newport, Vermont

3rd Place - Ira Cohen, Londonderry, New Hampshire

Honorable Mention - Ginger Adell, Readfield, Maine

Henry Grape, Holcomb, Wisconsin
Charles Pingree, Cornish, Maine.

Entertainment was provided by a superb brass ensemble. They were enjoyed by all. Maine provided us with a spectacular "performance".

A few quick personal "thank you's". Thanks to Robert Smith, John Hodgkins, Elaine Mace, Vicki Schmidt, and to all of the Maine Maple Producers Association. We shall all treasure your friendliness and hospitality. Thank you Maine.

So, another one under our belts. One we shall never forget. But forward we go to New York with great anticipation.

I have heard it said, "as goes Maine, so goes the nation". If that is true, this nation has great prospects. So goodbye to Maine, looking forward to New York. See you all at Batavia, New York Sheraton Hotel, October 21, 22, & 23, 1990.

Till we meet again. Happy Holidays and Successful Sugarin'.

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SELECTING "SWEET" SUGAR MAPLE TREES

by Dr. Peter W. Garrett and Kenneth R. Dudzik,
Northeastern Forest Experiment Station, U.S.
Forest Service, USDA, Durham, New Hampshire
03824

Because sap-sugar concentration in sugar maple trees varies from season to season, from day to day, and even from hour to hour, it is difficult to sample and assign a "sweetness" value to individual trees. An indirect approach using a more constant factor might be a better method of predicting the potential of a tree to produce sap of a given sugar content. Of all the tissues in a sugar maple, the ones that contribute most to the concentration of sugars in cell sap

are the ray cells. These are the small cells, often occurring in multi-celled bundles that run horizontally and produce the "fleck" seen in wood. Where these cells adjoin the vertical cells from which sap is obtained by tapping, openings occur which permits the movement of material from the storage cells (rays) to the conduction cells (xylem elements). If a correlation existed between the sap-sugar concentration and the proportion of ray tissue present in the stem it might be possible to measure the ray tissue at any time of the year and assign trees to different sweetness categories.

Papers pointing out the importance of evaluating sap-sugar concentration in individual trees have appeared in the literature since the mid-1800's. More recently the questions of how sugar/



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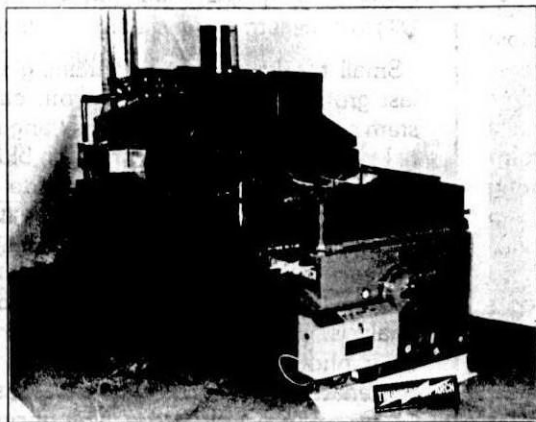
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starch is formed, where it is stored, how it is converted, and how and why it moves in the stem have been investigated. While the anatomists and physiologists were looking within the stem, the ecologists were looking at external factors that influence the volume and concentration of sap-sugar in individual trees. Only in the past few years have the geneticists had appropriate material to begin a study of inheritance patterns that might be useful in a tree improvement program to upgrade quantity and/or quality of sap.

Variation in the amount of sap produced by individual trees has been recognized almost as long as people have been tapping sugar maple trees. Clark (1875) is generally recognized as having been the first to systematically study the problem of sap flow in a number of genera including maple. Among other observations, he recorded sap pressures of individual trees throughout a 24-hour period and noted sharp peaks of pressure in the morning hours that have since been explained by Marvin and Erickson (1956).

Materials

In the spring of 1968 the Sugar Maple Project of the Northeastern Forest Experiment Station, then located in Burlington, Vermont, established range-wide provenance/progeny plantings in several states. In 1982 that program was transferred to the Genetics Project at Durham, New Hampshire. When the trees in these plantings were 17 years old the planting on the Fernow Experimental Forest near Parsons, West Virginia was selected for additional studies on inheritance of response to wounding. One tree in each two-tree plot was wounded and seven months later the wounded trees were cut. Portions of the main stem were brought to the Durham laboratory for further sectioning and analysis. Stem sections were stored under refrigeration (36°F)

until used in the current study.

Because this was an exploratory study, we decided to limit our initial investigation to a few progenies and individuals that according to our records had diverse sugar readings over the previous six to ten year period, and later expand the work to other progenies if the data warranted it. For this study we chose two seed sources with relatively high sap-sugar (31-Cass County, MN; 34-Mille Lacs County, MN) and five seed sources with lower readings (17-Berkshire County, MA; 23-Franklin County, ME; 28-Iron County, MI; 29-Quebec, Canada; and 36-Chittenden County, VT).

Small blocks of wood containing the last growth ring were taken from each stem section. Two thin sections (tangential surface) were made from each block and microphotographs were made of three random fields on each of the two sections. Using the same magnification for each photograph, we were able to maintain uniform field size for our analysis. Tracings were then made of each photograph filling in all areas of uniseriate (single cell) and multiseriate (groups of cells) ray tissue. The tracings were sent to Decagon Devices Inc., Pullman, Washington where they were run under a Delta-T Area Meter to provide ray tissue as a percentage of total field. Each tracing went through the meter three times to provide an accuracy of slightly better than 98 percent.

In addition to the sections from the West Virginia planting that were all taken from a position approximately 4.5 feet above ground level, we decided to look at other parts of a stem of sugar maple to see if there was variation related to stem position. We wanted to know if our sample point was typical of the bulk of the stem. A single tree from York County, Maine was cut down and sections taken from the stump area, 3.5, 4.5, 5.5, 14.0, and 23.0 feet above ground. At each of these points

sections were taken at each of the four cardinal directions for a total of 24 sampling points (6 heights, 4 directions). Two sections and three fields of each section were photographed for a total of 144 measurements from this tree. There was no difference in the amount of ray tissue due to direction (Table 1). No difference was found in ray tissue as a percent of total wood tissue due to height on the main stem except for a slight increase just above the stump. The amount of ray tissue in this sugar maple tree was essentially the same at all points which suggests that the sampling point in our main study should provide a valid measure of ray tissue volume.

Table 1. - Percentage of ray tissue in sample sugar maple tree

Height (feet)	North	East	South	West	Average
Stump	12.70	11.97	13.77	14.20	13.16
3.5	14.37	14.43	14.60	14.30	14.43
4.5	13.17	13.97	12.67	11.83	12.91
5.5	10.50	11.13	11.47	12.37	11.42
14.0	11.57	12.00	10.87	10.27	11.25
23.0	10.37	11.63	11.03	11.70	11.18
Average:	12.11	12.52	12.40	12.52	12.39

Using one-way analysis of variance, we then looked at variation in percentage of ray tissue between sources and found highly significant differences (Table 2).

Table 2. - Comparison among sources using Approximate Student Newman-Keuls test. One way analysis of variance.

Source No.	Number of Samples	Percent ray tissue	
34	8	15.81	A *
28	19	15.63	
23	14	15.11	A B
17	21	15.07	A B
31	8	14.56	A B C
29	15	13.95	B C
36	26	13.43	C

* Ray tissue values sharing a common letter are not significantly different ($P \leq 0.05$).

Variation	df	SS	MS	F
Total	110	367.03	3.34	
Source	6	81.35	13.56	4.94**
Error	104	285.68	2.75	

** = <0.01 level of significance.

We then looked at families (trees grown from seed from the same parent

tree) within sources and found very little variation using the same test (Table 3).

Table 3. - Comparison of variation between families within sources.

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Source 17 (Berkshire Co., MA)

Variation	df	SS	MS	F
Total	20	37.32	1.87	
Family	7	7.93	1.13	.50 not significant
Error	13	29.39	2.26	

Source 23 (Franklin Co., ME)

Total	13	22.11	1.70	
Family	6	17.92	2.99	4.98 * Significant at 5 percent level
Error	7	4.20	.60	

Source 28 (Iron Co., MI)

Total	18	54.55	3.03	
Family	6	28.48	4.75	2.18 not significant
Error	12	26.07	2.17	

Source 29 (Quebec, Canada)

Total	14	56.71	4.05	
Family	6	41.17	6.86	3.53 not significant
Error	8	15.54	1.94	

Source 31 (Cass Co., MN)

Total	7	11.30	1.61	
Family	4	7.95	1.99	1.78 not significant
Error	3	3.35	1.12	

Source 34 (Mille Lacs Co., MN)

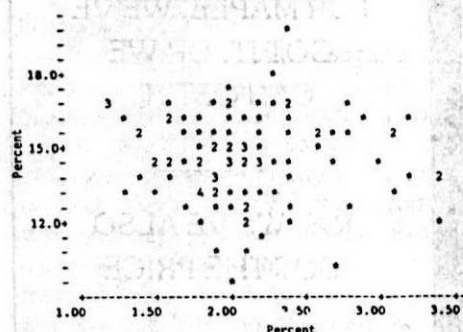
Total	7	39.05	5.58	
Family	6	37.25	6.21	3.44 not significant
Error	1	1.80	1.80	

Source 36 (Chittenden Co., VT)

Total	25	64.64	2.59	
Family	7	11.55	1.65	.56 not significant
Error	18	53.09	2.95	

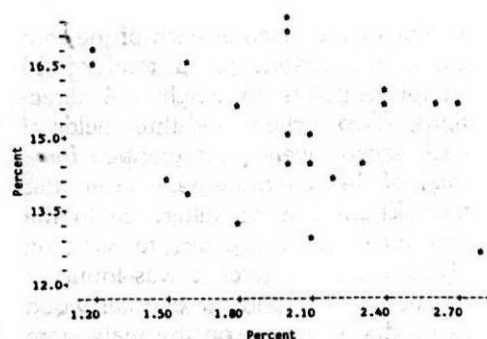
We then plotted ray tissue (percent) over sap-sugar concentration (percent) for every tree in the study regardless of source or family and found no apparent correlation (Figure 1), suggesting that trees with more ray tissue can either have high or low sugar concentrations and the same can be true of trees with small amounts of ray tissue.

Figure 1. Percent ray tissue over sap-sugar concentration for all trees.



We also looked at possible correlations between ray tissue and sap-sugar for individual trees within sources and some were slightly positive while others were slightly negative - but all were very weak (Figure 2).

Figure 2. Source 17 (Berkshire Co., MA). Correlations of -0.282 for ray tissue and sap-sugar for all trees from this source.



Conclusions

The easiest conclusion to draw from our results is that there was no apparent correlation between the amount of sugar storage tissue (ray cells) and sap-sugar concentration in sugar maple trees. If that is true, then it would not be possible to use wood samples to select "sweet trees". Our failure to find correlations between sap-sugar readings for the parent trees and progeny from those parent trees in previous studies, or to find any patterns between ray tissue and sap-sugar, might mean there is no correlation. Or these negative results might be due to our inability to obtain reliable and consistent readings of sap-sugar. If the standard method of taking one or several readings over several seasons produces inaccurate values, then anything correlated with the true values would appear to be uncorrelated.

While our data failed to establish a correlation between ray tissue and sweetness of sap in sugar maple, we do know more about ray tissue in this species. We now know that the amount of ray tissue is similar throughout the main stem and that percent of ray tissue in this species may be slightly lower than previously reported (Meyer 1922). We also know that there is significant variation between sources or populations of sugar maple, though we did not include enough sources in this study to determine if there are geographical patterns to this variation. And finally, our data indicate that there is little or no variation between families within any particular source.

The fact that ray cells are the primary

storage sites for sugars in maple and other species is well documented. How the abundance of such tissue might influence sap sweetness during the spring sap flow period could not be answered by this study. Additional work needs to be done on the problem of evaluating relative sap-sugar concentration among trees.

This research was funded by the North American Maple Syrup Council and the USDA, Forest Service, Northeastern Forest Experiment Station.

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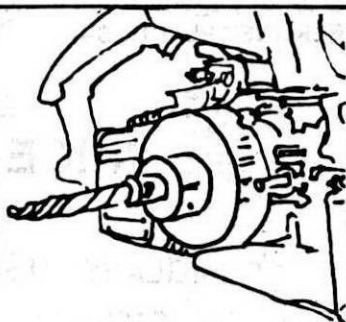
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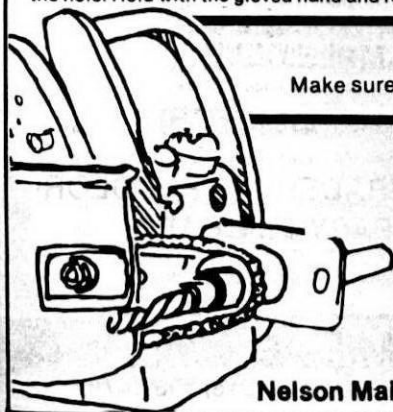


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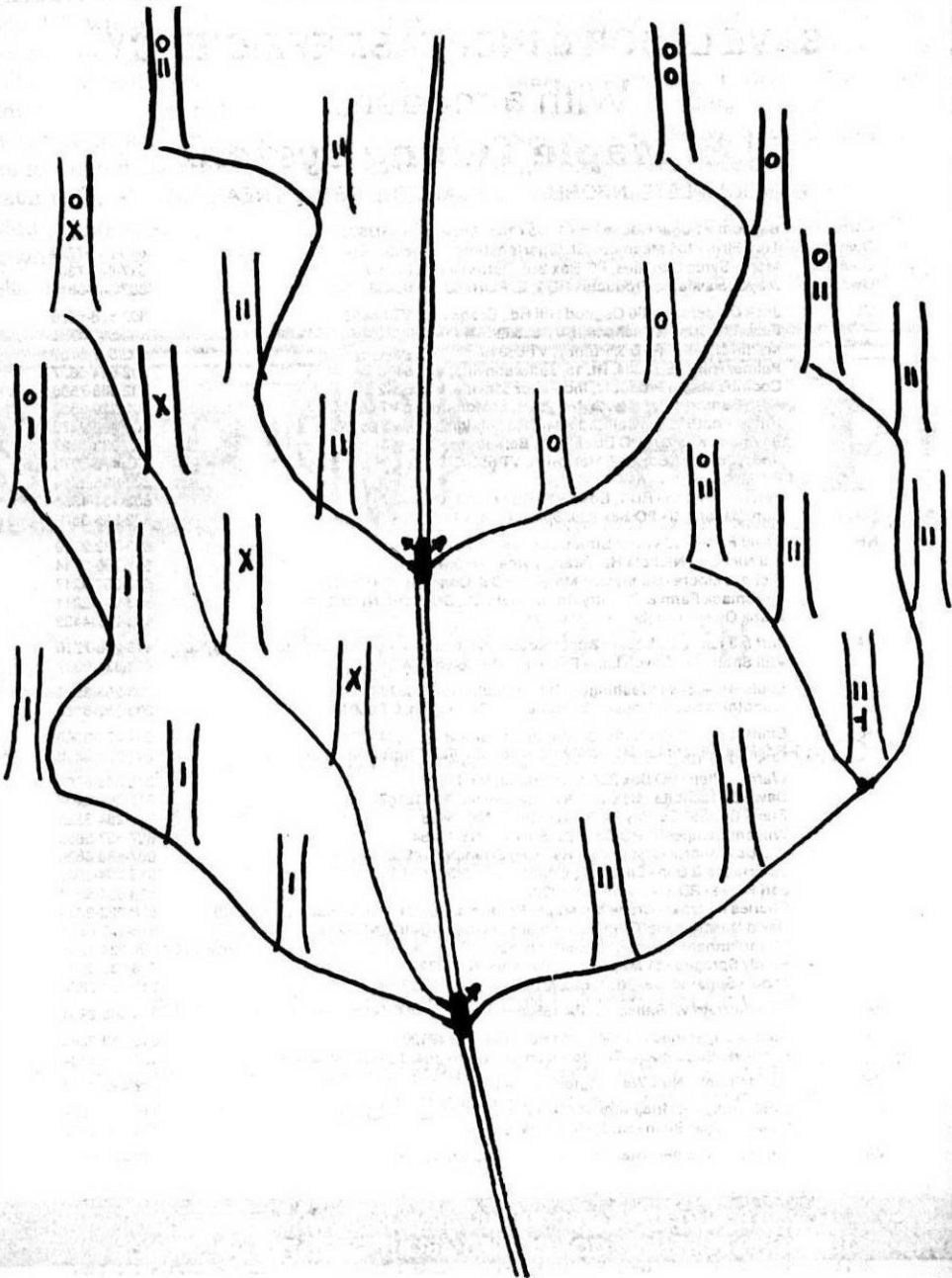
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	Todd's Sugarhouse - Rt. 1, Box 470, Norwood, NY 13668	315-353-2808
PA	Dale Jeffery - W. Salisbury, PA 15565	814-662-2934
MI	Dodd's Sugarshack - 1654 Dodd Rd., Niles, MI 49120	616-683-3283
	Elm River Sugarbush - Ted Johnson, Rt. 1, Box 104, Toivola, MI 49965	906-288-3434
OH	David Stump - New Washington, OH 44854	419-492-2731
WI	Jeff Nordby - Prairie Farm, WI 54762	715-455-1529
	Polak's Sugar Bush - Rt. 2, Merrill, WI 54425	715-536-4032
VA	Ivan Puffenbarger - Star Rt. B, Box 70, Blue Grass, VA 24413	703-474-2771

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MARKING TREES FOR TUBING DIAGRAM



probably mark these trees with a "11". If there's one going up between them, the trees would get an "X". If there's a 4th line coming into this tee, those trees would get an "O". If not, the first line out of the second main line tee would get the "O". Then you can start using the same symbols over because they won't be right beside that symbol when it was first used.

I make the symbols 4" to 6" high and they can be seen a quarter of a mile away. I've tried other colors but like white the best. Spray cans are no good - paint is too thin and just makes a mess. Put on with a brush it should last at least 10 years.

All marks are made on the downhill side or the side that can be seen best as you go up the route of the line.

A tee mark (I) is made on the tree under the symbol where a branch line is sy'd in. See diagram of trees marked with an "11".

On the last tree of each line an "O" is put over the symbol. This denotes a dead-end.

This may be confusing and sound worthless but don't throw it away. Save this copy and in the next issue I'll explain how we mark the tags that go on the rolls of tubing. I think that will help it make sense.



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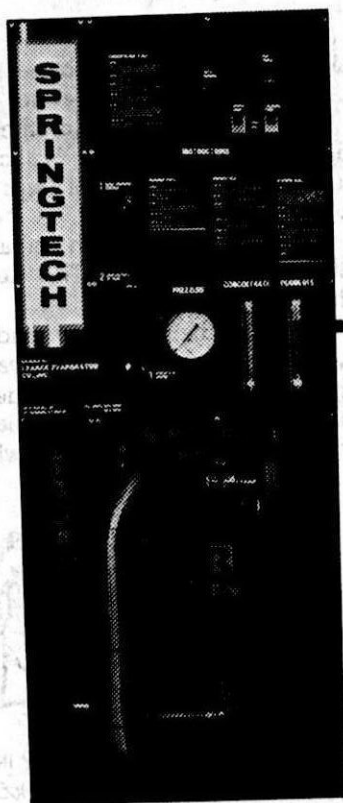
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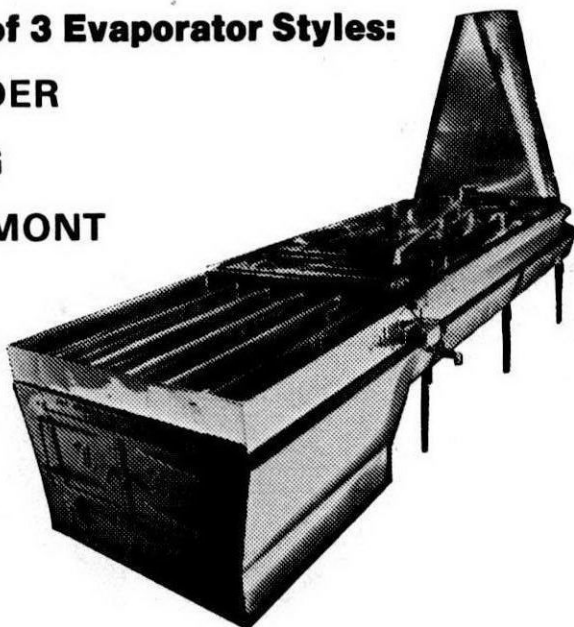
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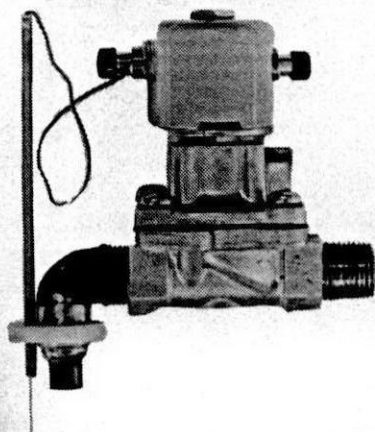
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