

Maple Syrup Digest



VOL. 18A, NO. 1

FEBRUARY 2006



PRESRT STD
U.S. POSTAGE PAID
CANTERBURY, NH
PERMIT NO. 14

Return Service Requested

Maple Syrup Digest
PO Box 240
Canterbury, NH 03224

New England Container Company

HOME OF THE FAMOUS CABIN CAN

- Low, Factory-Direct Prices
- Safe, Lead-Free Cans
- Popular & Convenient Sizes
- Tin Construction Protects Color, Flavor & Grade
- All Cans In Stock Year Round



**CABIN CANS AVAILABLE IN
250 ML & 500 ML SIZES**



GALLONS • HALF GALLONS • QUARTS • PINTS • HALF PINTS



**All Containers
are properly
sized for Hot Pack maple
syrup
- NOT OVERSIZED!**

75 Jonergin Drive • Swanton, VT 05488 • 802/868-3171

Join Us For Our
Grand Opening Celebration

49 Jonerin Drive
Swanton, VT 05488
(802) 868-5444

www.LeaderEvaporator.com



February 3rd & 4th 9-3pm

**Come see the United States Largest Warehouse,
Showroom, and Store for a full line of Maple
Supplies, and Equipment proudly Made in the USA!**

So come see the familiar faces in a big new place. Take Vermont Route 78 1.7 miles west of I-89 exit 21, or Vermont Route 78 9.2 miles east of US Route 2 to Babbie Boulevard. Go 1/10 of a mile on Babbie Boulevard and turn right onto Jonerin Drive. You will see us on the left from there.

NEW!!!  **5/16 Tree Saver
Sanitary
Spout Extension**

This inexpensive fitting will allow sugarmakers the ability to put a bacteria free spout in the tree every year. The throw away spout extension is designed to get sugarmakers maximum production every year!

LEADER
EVAPORATOR CO.

Tap Into It!!!

MAPLE SYRUP DIGEST

Official publication of the
NORTH AMERICAN MAPLE SYRUP COUNCIL

Published and Edited by:

ROY S. HUTCHINSON

P.O. BOX 240, CANTERBURY, NH 03224

Phone: 603-783-4468 • Fax: 603-783-9953 • Email: mapledigest@tds.net

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

Postage paid at: Canterbury, NH 03224

NORTH AMERICAN MAPLE SYRUP COUNCIL DIRECTORY OF OFFICERS

ELIZABETH COLLINS, President — 334 W. Main St., Cottonwood, MN 56229

507-828-9215 • E-mail: beth.collins@mn.usda.gov

TOM McCRUMM, Vice President — 755 Watson-Spruce Corner Rd., Ashfield, MA 01330

413-628-3268 • E-mail: tom@massmaple.org

JOE POLAK, Secretary-Treasurer — W1887 Robinson Dr., Merrill, WI 54452

715-536-7251 • E-mail: mplehollow@dwave.net

DIRECTORS

Ron Wenzel — 522 East St., Hebron, CT 06248

860-649-0841 • E-Mail: rlwenzel@snet.net

David Hamilton — 6025 N100 East, New Castle, IN 47362

765-836-4432 • E-Mail: sugarcamp@bigfoot.com

Jeremy Steeves — PO Box 471, Skowhegan, ME 04976

207-634-3521 • E-Mail: jsteeves@puremaple.com

Ron Thomas — 492 Houghton Creek Rd., Rose City, MI 48654

989-685-2807 • E-Mail: debby1612@hotmail.com

Terry Stanley — 2981 No. Lake Miltona, Miltona, MN 56354

218-943-2580 • E-Mail: tstanley@midwestinfo.net

Roger St.-Amand — 500 California Sett Road, California Sett., NB E3Z 1X1

506-273-2179 • E-Mail: stamandjr@inspection.gc.ca

Hank Peterson — 28 Peabody ROW, Londonderry, NH 03053

603-432-8427 • E-Mail: sapman@worldnet.att.net

Roger Sage — 4449 Sage Rd., Warsaw, NY 14569

585-786-5684 • E-Mail: sagemaple@frontiernet.net

Avard Bentley — 12 Valley Rd., Westchester, N.S. B0M 2A0

902-548-2973 • E-Mail: jbentley@ns.sympatico.ca

Doug Fitch — 1591 Twp. Road 1353, Ashland OH 44805

419-281-4407 • E-Mail: fpf@bright.net

Bill Robinson — RR2, South St., Auburn, Ont. N0M 1E0

519-529-7857 • E-Mail: robinmap@hurontel.on.ca

Jim Sampson — 156 Melody Rd., Honesdale, PA 18431

570-488-6833 • E-Mail: jdsampson54@hotmail.com

Luc Lussier — 2100 St. Laurent, Plessisville, Que. G6L 2Y8

819-362-3241 • E-Mail: llussier@citadelle-camp.coop

Rick Marsh — 3929 Vt Rte. 15, Jeffersonville, VT 05464

802-644-2935 • E-Mail: rmarsh@together.net

Lyle Stockwell — N 3870 730th St., Ellsworth, WI 54011

715-594-3632 • E-Mail: cstockwell@redwing.net

DIGEST ADVERTISING RATES

2 Page Spread	\$450.00
Full Page	240.00
1/2 Page Vert. or Horz.	135.00
Column Inch	19.00
Classified	70c per word

SUBSCRIPTION RATES

United States	1 year - \$5.00
Canada, US funds	1 year - \$7.00

COVER: Sugarhouse of the
Casbohm family, Albion PA.

GREETINGS FROM YOUR PRESIDENT



Hello from the President. I hope all of you had a very Merry Christmas or Happy Hanukkah and that your New Year is starting off well.

My apologies to those of you that have tried to reach me by phone, especially the past month or so. For some reason, my cell phone decided not to save any messages that were left and all I got was message saying "X number of messages have exceeded their storage length and have been deleted" even though I received the same message the day before. Ain't technology wonderful! Several conversations with the phone company (they had no idea why either) later, I think the problem has been solved. So if you tried to reach me in December and I didn't get back to you, please try again or write me a letter. My mail does reach to me.

Minnesota is having a white winter with mild temperatures thus far. It almost feels like I should be out tapping but I know it is too early for that here. I do have my fingers crossed, hoping for a good maple season. The weather is encouraging me to start getting ready for the season. I always think I put equipment away in a logical place, cleaned and ready for the next year only to find it in need of cleaning or not finding it where I thought I put it. But while searching for the missing object, I check the inventory of containers, spiles, tubing and connectors, so I guess it is still a good thing.

I have been working on re-writing the NAMSC by-laws. Hint to all Board Members that haven't gotten me their comments - you still have time to get them to me. I hope to have them finished and out to the By-law committee for review by the end of April.

I have also been discussing the membership of the Research Fund committee with various folks. I have almost finalized the membership but am still trying to phone a couple folks. Between their schedule and mine plus me forgetting their phone number and my cell phone at home, it is taking me a bit longer that I had planned but progress is being made. I will let you all know the membership of the committee in the next issue.

Here's to a good maple season, with the perfect temperatures, blue skies, and just the right amount of snow. Remember as you fill all those jugs, tins, and bottles, your penny per container donation to the Research Fund helps all of us.

Yours in Maple,

Beth

Keith A. Dufresne **DUFRESNE'S SUGAR HOUSE**

113 Goshen Road
Williamsburg, MA 01096
Ph/fax 413-268-7509
sugarmaker@msn.com

DEALER: CDL, IPL, DALLAIRE
Evaporators, ROs, tubing,
fittings, etc.

IMSI NEWS

*By Larry Myott
Executive Secretary*

When you get this issue of the Digest, maple sugaring 2006 has begun in some areas of the maple world. Once again, like the new year, we are optimistic and expecting the best of crops. Producers have been preparing since last fall in anticipation of that first sap run. The downed trees and branches have been cut up, the tubing repaired and, yes, now the taps have been tapped. The decisions that we make in the sugarbush will determine the crop for 2006.

We know how to do it, but sometimes we don't follow those general rules of maple production. You have attended maple tours, maple schools and seminars and read everything there is to read on how to—in the maple business. Now is the time to put all that knowledge to work to ensure a good maple crop with peak quality. I am reminded of the favorite saying of one of my old timer friends, "We are the sum of our decisions."

The 2005 crop is pretty much gone, there is very little syrup in the field. The darker grades have disappeared and of the dark syrup still in storage, the price has risen considerably. There is definite need for an increase in production on the U.S. side of the border. Although there is still a large inventory of surplus syrup in Quebec warehouses, the report is that it has been in demand and the supply is going down.

GETTING READY MEANS BEING SAFE TOO!

Many copies of the new maple publication titled, "Chemical Safety in Maple Sugaring Operations," were distributed at the international meetings last fall in Quebec. This is a valuable little publication to help sugar-makers be safe and use chemicals in a way that will not harm your business, the environment, or perhaps most importantly the entire maple industry. Prepared by University of Vermont maple researchers Dr. Tim Perkins and Abby van den Berg at the Proctor Maple Research Center, this should be in every sugarhouse just as a reminder that not all chemicals can be used in the food industry.

In years past, we have had some very near disasters with the use of chemicals for cleaning or other purposes that were not intended, or registered, for use in the food industry—in particular the maple industry. On both sides of the border, agricultural and food chemicals must be registered for the intended use. If they are registered, it is illegal to use them. If you are using acids or other cleaners in your maple business, make sure you know how to use them and take all the required precautions. If the label is in French and you read only English, that does not count as understanding all the precautions. You'll need an interpreter, or call your supplier for the English translation.

For a copy of twelve publication, email the Proctor Maple Research Center at pmrc@uvm.edu. You can also get a copy by calling the center at 802.899.9926 or writing to PMRC, P O Box 233, Underhill Center, VT 05490.

IMSI DUES ARE DUE

Members of the IMSI have been sent dues notices for 2006. All dues are due not later than March 1. Members are asked to fill out the form that comes with the notice and mail it back with their check to Treasurer Gary Gaudette, 919 Bronson Road, St. Albans, VT 05478 USA.

Questions about the IMSI and its dues structure? Contact Executive Secretary Larry Myott, see below for contact information.

(For information on the IMSI, call or write Larry Myott, IMSI Executive Secretary, 5014 Route Seven, Ferrisburgh, VT 05456. Email: Larry.Myott@uvm.edu visit the IMSI at: www.internationalmaplesyrupinstitute.com

General Products



New Products



MARCLAND

(518)532-7922

Maple Syrup Equipment & Supplies



- * Come browse in our fully stocked showroom
- * Leader-Grimm Distributor
- * Evaporators in stock
- * MARCLAND Draw-Offs
- * Lamb tubing & fittings
- * Sugar Hill jugs
- * UPS daily

"We are sugarmakers too!
Come visit with us!"

It's worth your trip to

Countryside Hardware

PO Box 409, Albany St., DeRuyter, NY 13052

Phone: 315/852-3326

FAX: 315/852-1104

www.countrysidehardware.com

Hours: Mon. - Fri. 8:00 - 5:00

Sat. 8:00 to 4:00



**UNITED STATES DEPARTMENT
OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
FRUIT AND VEGETABLE PROGRAMS
PROCESSED PRODUCTS BRANCH**

NOTICE TO THE TRADE

SUBJECT:

AVAILABILITY OF COLOR STANDARDS FOR MAPLE SIRUP

The Processed Products Branch (PPB), Fruit and Vegetable Programs of the U.S. Department of Agriculture (USDA) hereby notifies the food industry and other interested parties of the availability of the newly issued USDA color standards for classifying color on the basis of the United States Standards for Grades of Maple Sirup. The new plastic USDA color standards were issued September 26, 2003, to PPB field offices for use in grading maple sirup and replace the glass color standards distributed in May 1956. The USDA color standards are commercially available from:

Gretag Macbeth, Munsell Color
617 Little Britain Road
New Windsor, NY 12553-6148
Tel.: (800) 622-2384 or (914) 565-7660,
Fax: (914) 561-0267
Website: <http://usa.gretagmacbethstore.com/>

For further information about these and other USDA color standards, please contact the Processed Products Branch at (202) 720-4693.

Terry B. Bane, Branch Chief

Distribution - Special
Agriculture-Washington



**Lapierre USA has
joined up with Corey's
Maple Services for
tubing installation.**

**Call for estimates on
your sugarbush today!**

Division of Lapierre, Waterloo, Small, Inc.

Call your local dealer in your area for all of your maple equipment and supplies.

CONNECTICUT

Litchfield

Hill Jack Sugar Shack

Jesse & Jim Nivolo
860-482-6052

MASSACHUSETTS

Ashfield

South Face Farm

Tom McCrumm
413-628-3268

Tolland

Dragon Fly Farm

Charles Adams
413-258-0285

MAINE

North Gorbham

Merrifield Farms

Lyle & Jo-ann Merrifield
207-892-5016

Vassellboro

Suga Country Products

Joe Suga
207-923-3355

MICHIGAN

Portville

Maple Syrup Supplies

Jean Maday
517-645-7305

NEW HAMPSHIRE

Alstead

Bascom Maple Farm

603-835-6361

Lancaster

Fullers Sugarhouse

Dave Fuller
603-788-2719

Lyndeboro

Maple Guys

Chris Pfeil
603-801-3158

NEW YORK

Castorland

Ken Zehr
315-493-4607

Dale

**Wolcott Maple
Equipment**

Doug & Charlotte
Wolcott
585-786-3893

Delancey

Catskill Mountain Maple

Tom Kaufman
607-746-6215

Forestville

**Sweet Ridge Maple
Shoppe**

Dan Brittain
716-988-5933

Lakewood

Big Tree Maple

Lloyd Munsee
716-763-5917

Portville

Sprague's Maple Farm

716-933-6637

Redwood

Val's Maple Kitchen

Tom Bain
315-482-2660

Sherburne

Don Cook
607-674-9593

West Chazy

Robert Atwood
518-493-2722

Westford

Brodie's Sugarbush

Frank Brodie
607-264-3225

OHIO

Salem

Misty Maple Sugarhouse

David Hively
330-332-0728

PENNSYLVANIA

Springville

Loch's Maple

Randy Loch
570-965-2679

Westfield

**Brookfield Maple
Products**

Bud Bower
814-367-5284

VERMONT

Derby

Farm Yard Store

802-766-2714

East Fairfield

Mayotte Maple Product

Dave Mayotte
802-849-6810

Glover

Buckey Shelton

802-525-4658

Hardwick

Andy Messier
802-472-5973

Middlebury

The Field Farm

Andy Davis
802-388-7575

Putney

**Southern VT Maple
Products**

Dan Crocker
802-287-6606

WISCONSIN

Merril

Maple Hollow

Joe Polack
715-536-7251

LAPIERRE USA, INC.

**Division of Lapierre, Waterloo, Small, Inc.
MAPLE SUGARING EQUIPMENT**

555 Route 78, Swanton, VT 05488

Lapierreusa@yahoo.com • 802-868-2328



U.S. Sales Manager Matt Williams

**FINANCING
AVAILABLE**



2006 Maple Research

The North American Maple Syrup Council at its Annual Meeting at Trois-Rivieres, Quebec approved funding for the following research projects in the upcoming year.

ONTARIO MINISTRY OF AGRICULTURE

- International Grades and Quality Standards for Maple Syrup
- Evaluation of Sap Filters

UNIVERSITY OF VERMONT

- Effects of Three Sugarbush Management Techniques on Major Forest Insect Disease Pests
- Natural Enemies for Biological Control of Lecanium Scale
- Parasitoids of Native Longhorned Beetles for Biological Control of Asian Longhorned Beetle (ALB)

UVM – Proctor Maple Research Center

- Timing of Tapping under Vacuum
- New Research Facility for Investigating Effects of Sap Processing Equipment and Techniques on Maple Syrup Chemistry and Quality
- Strategies to Limit Reductions in Maple Sap Yield in Vacuum Installations

CORNELL UNIVERSITY

- Improving Growth of Sugar Maple
- Improving Sap Quality Through Sap Collection System Evaluation Using Glucose Testing

OHIO STATE UNIVERSITY

- Analysis of First Generation Super Sweet Maples Sugar Concentration

Voluntary donations help continue these critical research projects. Donations can be made through your plastic, glass or metal container suppliers or sent directly to us. For more information regarding the Research Fund contact:

Richard P. Norman, Chairman, 387 County Road, Woodstock, CT 06281
Phone 860 974-1235, Email: r.norman@snet.net

Kay Carroll, Treasurer, 79 East Chestnut Hill Road, Litchfield, CT 06759
Phone 860 567-3890, Email: kaycarroll@aol.com

The NAMSC-Research Fund is a non-profit, volunteer managed committee of the North American Maple Syrup Council, Inc. (2-06)

OUR QUIET LEADER

By Russ Davenport

The passing of Lewis Staats has prompted me to search my memory and library to recall some of the history that Lew made news. Cornell University has always been a leader in the education of the maple people. My recollection goes back before Lew came to Lake Placid. A forester by the name of Fred Winch worked at Cornell and was instrumental in the education of young people in the woods all around us. He put into print all the facts and information about the different species of trees in the forest. The Cornell 4-H Club Bulletin 85 tells how to know your trees by leaf characters and twig and bud characteristics during summer and winter. This pamphlet identifies fifty common species of trees mostly in the state of New York. He was also very active in this business we call sugaring. The forest at Lake Placid was his laboratory as well as his classroom. After thirty-five years as Extension Forester at Cornell, Fred Winch retired.

Here is where Lew Staats came into the picture. I remember him as a young man ready and willing to work in the woods. He took over and continued work at Cornell that related to maple. The first project in 1972 that Lew worked on was a Milk Can Vacuum Dump Unit to assist gathering maple sap with plastic tubing. He worked with Bob Morrow about the re-heating of drum syrup. The question was - does re-heating syrup for retail containers tend to darken the

syrup. His answer was to start with syrup a little better grade so it would still remain in the same grade after heating.

Lew became Resident Manager in 1966 and continued with the ever increasing demonstration of the many facets of maple production. It was recognized that he was an important part of the project because of his forthright handling of requests or information and his special status resulting from being a producer as well as an Extension man and the application of maple knowledge through demonstration, maple schools, and other appropriate means.

The Heaven Hill Sugarbush became a Lew Staats Laboratory. Lew did experimental testing of chain saw tapping bits for boring tapholes for sap spouts. At the New York Maple Schools Lew worked with plastic tubing, insect and diseases in the maple sugarbushes. Studies in evaporator efficiency, pre-heaters, and oil-fired evaporators were part of his research. I remember walking through the maples at the research station and listening intently to his comments.

In 1997 Lewis Staats was inducted into the American Maple Hall of Fame in Croghan, New York. He was a great resource in maple management and for that matter in any forestry subject. Many memorable visits usually included hunting and fishing stories. He was an all-round woodsman, teacher, and researcher. His work will be with our industry for eternity. My thoughts are given in respect to Lew and his family.

Thank you.

WISCONSIN TO HOST INTERNATIONAL MEETING OCTOBER 18-21, 2006 GREEN BAY, WISCONSIN

The Wisconsin Maple Syrup Producer's would like to extend a "Very Warm Welcome" to all of you to come and see our beautiful state. We promise this will be a very educational and fun filled time! The IMSI and maple businesses from around the maple world, along with the Wisconsin Maple Syrup Producers will be sponsoring this great maple event. Be sure to mark your calendars today for the North American Maple Syrup Council (NAMSC) and the International Maple Syrup Institute (IMSI) in Green Bay, WI at the Regency Suites Hotel and WI Convention Center.

The important dates are Wednesday, October 18, check-in to Sunday, October 22, 2006, check-out. These dates were planned with the people who are flying to get a better rate on air fare. You will be able to use the Hotel shuttle to and from the airport, as a courtesy from the hotel. More on that at a later date.

Call now to make your reservations for the hotel. The rates are \$109.00 (standard) - \$119.00 (king) per night, plus tax. Children under 12, stay free. No more than 6 people in a room. Phone number for reservations is 1-800-236-3330 and be sure to let them know that you are with the maple convention, so that

you get this room rate. Reservations may be cancelled without penalty no later than 6 PM on the day of arrival. Reservations cancelled after this time will be subject to charges equal to one (1) night and applicable taxes.

All suites are spacious two-room living quarters featuring a private bedroom and a separate living room with a sofa bed and dining/work area. Other amenities include a kitchen with wet bar, microwave, refrigerator, coffee maker, two telephones, voice mail, modem hookups and two remote-controlled televisions with rental videos available. Non-smoking and accessible accommodations are available.

Along with their indoor swimming pool, whirlpool, steam room, sauna and fitness center, overnight guest will enjoy complimentary FULL breakfast and two hours of complimentary beverages (wine, beer, soda) in the evening. This is for hotel guests only. There is also free parking for hotel guests who drive to our convention. Those who are not staying at the hotel will have to pay 50 cents per hour in the ramp across the street from the hotel.

For those of you who do not want to stay at the Regency Suites, there are two other motels within walking distance of the Regency. They are the Holiday Inn and Days Inn. You will not have the full breakfast, beverages in the evening, nor the use of other Regency items. Only what will be for the convention. We will be able to get you breakfast tickets for \$7.50 per person per day.

We will be having seminars, scientific presentations, tours, banquets,

door prizes, contests, a large trade show, along with special meetings. Of course, there is always the maple get-togethers that we all enjoy and look forward to at every convention, so please remember to phone in your reservation and we will be looking forward to seeing you in October of 2006.

If you or someone you know would like to be a presenter at our meeting, please contact Joe Polak 1-715-536-7251 to make arrangements. Whether you are a maple producer or a person who has been or planning or doing maple research. Time is going too quickly and we need to get this lined up as soon as possible. Please give Joe a call today.

Happy New Year and wishing all of you a Great Maple Season. Hope to see each and everyone of you in Green Bay.

Gretchen Grape
Executive Director Wisconsin
Maple Syrup Producer's Association
Phone: 715-447-5758
Fax: 715-447-5745
Email:
gretchen_grape@yahoo.com (Be
sure to put the underscore between
my name)

WEST MINOT SUGAR HOUSE

WEST MINOT, ME 04288
1-207-966-3643
Wayne and Joni Slattery

**DEALERS FOR
CDL/MAPLE PRO, INC.**

**NEW AND USED EQUIPMENT
LARGE STOCKED SHOWROOM
"MAINE" PLASTIC ALL SIZES
CALL AHEAD FOR BEST TIMES**

Serving Sugarmakers since 1934



Fully stocked warehouse.
Open year-round.

Leader Evaporators
Lamb Tubing
Springtech R.O.s
Marcland Draw-Offs
Airablo / Bernard
Tanaka Tappers/Pumps
Bacon Jugs
New England Container
Specialty Glass, labels

UPS shipments Daily.
Experienced Sugarmakers.

Sugar Bush Supplies Co.

2611 Okemos Rd.
Mason, MI 48854
517-349-5185
517-349-3088 fax

SBFarms@tds.net

FOR MORE SAP & HIGHER PRODUCTION, CONSIDER A VACUUM SYSTEM FOR 2006

*Bascom Maple Farms is the source for all
your maple sugaring equipment and supply needs.
Call or visit us today.*



USED EQUIPMENT FOR SALE

2' x 4' Vt evaporator w/stainless pan	\$1,800
2' x 6' Oil fired evap. w/insulated arch, oil burner, new stack & stainless flat pan	\$1,950
3' x 8' Grimm oil or wood fired evap. w/insulated arch, oil burner, stainless pans (soldered fue, & welded syrup pan), stainless stack, stainless hood and Grimm preheater	\$3,900
4' x 16' Dallaire evaporator with stainless pans (raised flu) and stainless hoods	\$3,900
400 Gallon stainless milk bulk tank	\$ 650
Electric Airablo Belly releaser w/1 1/2 HP pump	\$ 950
Cotton Candy machine	\$ 950
Marcland automatic draw off w/two solenoid valves and two probes	\$ 600
Seprotech RO machine 250 GPH w/two extra membranes	\$2,900
Airablo 600 GPH RO machine w/7.5 HP pump and new membrane	\$7,500

56 Sugarhouse Road, Alstead, NH 03602
603-835-6361 • FAX: 603-835-2455
www.bascommapple.com



ARCHIE'S SUGARHOUSE

(Taken from October, 1994 Maple Syrup Digest)

Dear Mr. Editor:

My wife, she sez, "Honest Archie," sometimes she calls me truthful Archie, "Why don't you tell that nice Mr. Editor man about our computer operated evaporator?"

Well, it wuz like this:

It all came about some time ago when these new small, home size computers first got invented. We have a neighbor, Ivanew Flipswitch, who's an electronics nut, and he talked us into it. He said he's set up the whole thing for me for free. All I had to do was buy the parts. Claimed a computer could run our whole outfit of evaporators and eliminate all the guess work. Heck, we already had the biggest and most modern outfit in the country, but I wanted to keep ahead of everybody so I told him to go get what he needed.

I really didn't think he'd go through with it, but a couple of weeks later he drove his 18 year-old pickup truck in

with the homemade cap on the back crammed full of stuff. He started unloading it and went right to work.

First he had a motor operated, variable volume controlled liquid input pump that would feed sap into the evaporator at the correct rate. We had eight six by twenty's at that time, but he only wanted to try it on one, thank heavens. This evaporator has 3 pans and he put one of those volume gadgets between each pan. Said the computer couldn't work float valves.

Out automatic syrup draw-off had been giving us some trouble but he said he wouldn't need the controller part, just the solenoid valve. The computer would take care of turning it on and off and correct for the change in air pressure.

He put liquid level controls on each pan so the computer could tell the pumps how much to put in them. He even put on boiling sensors so the computer could adjust the oil flow to the burners to make each pan boil faster. This required a variable air draft equalizer that would open or close to make the right air-oil mixture.

LEADER EVAPORATORS

New and Used

LAMB TUBING SUPPLIES

SUGARHILL CONTAINERS

ORDER EARLY & SAVE

ROGER C. SAGE

4449 SAGE ROAD

WARSAW, N.Y. 14569

Tel: 585-786-5684

**SUGA COUNTRY
PRODUCTS**

VASSALBORO, MAINE

Your one-stop

maple sugaring supply store!

We stock all your needs
from start to finish for both large and
small producers.

e-mail: suggs@psouth.net

TEL: 207-923-3355

He said he could even put a color sensitizer on that would tell us what grade we were making but I said that wasn't necessary since we always made all Grade A Light.

This guy sure liked gadgets. He put a photo cell on the sugarhouse door that opened it as you walked up and even turned the lights on inside. He replaced all the ball valves everywhere with solenoids so the computer could operate them. Even had an electronic refractometer that gave us a continuous printout of the sap sugar content.

He had to change all the wiring in the sugarhouse to accommodate this stuff, but when it was all hooked up he programmed it so all I had to do was operate the on-off switch. Up was on and down was off. I figured I could handle that.

The first day everything started off great. When I walked up to the door it opened and the lights came on. I turned on the computer and the screen said the sap tank was full. Things started to whirr and sap came into the pans and pretty soon the burners turned on. About then I noticed our garage door opened. A while later I looked out and it was closed again.

I didn't think much about that — figured my wife had left me after all this expense. It wasn't long though, before she came storming into the sugarhouse. Said her washer started filling up with water all by itself and wouldn't stop. Ran over the top and flooded the kitchen. She tried to call the repair man but a tape said, "Sorry, a computer somewhere has interrupted telephone service — please try later." She also said her

microwave kept going beep-beep-beep and wouldn't stop and my stack was spewing out some awfully black smoke. Apparently the computer worked the garage door better than the draft equalizer.

By that time I'd had enough. I pushed the switch down to the off position and started getting the other 7 evaporators ready to make syrup the old way.

Your truthful friend,
Archie

FROM THE EDITOR

As you may have noticed, page 4, the Directory, has changed. At the last NAMSC meeting the directors requested that along with their addresses and phone numbers, that I also add their e-mails. In order to accommodate this request I had to eliminate the names and address of the Field Editors. I just want to clarify that all are welcome to submit articles and Field Editors please continue to submit articles concerning your state.

We have been requested to make the Digest available by e-mail. Starting with this issue, it will be available. Submit your request by e-mail to me. If you request e-mail, this means that every issue from now on will be e-mailed to you, you will not receive a Digest in the mail.

A Thank You to all who advertise with us, this publication depends on its advertisers to stay afloat. Please patronize those that advertise.

May we have a great sugaring season.

Roy



Manufacturer of Quality Maple Syrup Equipment Just For The Fun Of It!

Complete Line of:

- Evaporators
- Evaporator Hoods
- Boiling Pans
- Draw-off Systems
- Sap Bag Holders
- Sap Bags
- Pail Covers
- Smoke/Steam Stacks
- Roof Jacks
- Forced Draft Systems
- Hydrometer Cups
- Finishing/Bottling Systems
- Custom built

The
AFFORDABLE
Line



Quality Built
Maple Syrup
Equipment,
designed with the
hobbyist in mind!

Dealers Nationally
Wisconsin
Minnesota
Michigan
Pennsylvania
New York

Dealers Wanted!

Proud to Say Made in the U.S.A.

For affordable quality equipment, contact us or a dealer near you for
all your maple sugaring needs.

GBM LLC

33186 County Highway W

Holcombe, WI 54745

715-447-8440

Visit our website: www.gbmlc.com

PROCTOR MAPLE RESEARCH CENTER UPDATE: INVESTIGATING THE EFFECTS OF SAP PROCESSING EQUIPMENT AND TECHNIQUES ON MAPLE SYRUP CHEMISTRY & QUALITY

Dr. Timothy D. Perkins, Director
Proctor Maple Research Center
University of Vermont
802.899.9926 Timothy.Perkins@uvm.edu

Maple syrup is produced and marketed as a pure and wholesome food product, free from contamination, and produced to the highest available standards. Although the basic process of evaporation to remove excess water has remained the same, the equipment and techniques used to transform maple sap into syrup have changed greatly over the past several decades, and continues to evolve as newer technology is introduced into the maple industry. While the focus of the maple industry has always been on producing a great product, other objectives sometimes overlap with, or may even conflict with the primary goals of making pure, great tasting maple syrup. For example, many of the evaporator advances were a result of high fuel costs. Also, the switch from soldered to welded pans, and accompanying manufacturing techniques, were made to limit lead and other contaminant exposure. More recently, air injection units were developed and are sold as a means to produce lighter syrup. It is well established that evaporation involves tremendous chemical and physical changes in the maple syrup. Further, the focus on production of very light colored and flavored syrup seems to have led to more (or at least more noticeable) off-flavors. Although the objectives of changes in processing in all cases listed above were quite reasonable, and in some cases very necessary, a comprehensive examination of the effect of new sap processing equipment and techniques on the chemistry and quality (especially flavor) has not been attempted for at least the past half-century.

A new research facility designed and dedicated to the study of the effects of sap processing equipment and techniques on the chemistry and quality of maple syrup is being constructed at the UVM Proctor Maple Research Center. This facility will allow researchers to evaluate the differences in maple syrup due to changes in sap processing equipment, including reverse osmosis, evaporators, and other evaporation equipment (steam-away, air injection units, etc.). The new facility is designed to allow up to four evaporators to be run simultaneously from a common source of sap. In this way, both major and minor changes in equipment and production techniques can be compared for the effect they have on maple syrup. There are no other comparable facilities existing for maple research in the U.S. or Canada.

Funds to conduct this research in this facility have been secured through grants from the U.S.D.A., with preliminary lab-based experiments underway. Research in the first two years of operation will focus primarily on the impact of air-injection units on syrup chemistry and quality. We have recently acquired identical two 3' x 10' CDL evaporators, with one equipped with air injection for experimentation. An advisory committee composed of a people representing a cross-section of the maple industry will help to decide on research projects to pursue in the future.

Funds for the actual construction of the building are derived from the proceeds of the UVM PMRC Endowment Fund, and from donations from a number of individuals, county, State, and Provincial maple associations, maple equipment companies, and from the North American Maple Syrup Council Grant Fund. All donors to the project will be acknowledged on a plaque mounted inside the new research facility. We still have some funds to raise to finish construction, so contact us if you are interested in making a donation.

Construction of the building started in mid-December 2005, with an anticipated completion date of February 1, 2006. The building itself is 28' x 44', with a small heated office area and space for an R/O. An elevated mezzanine will



Pictured above are photos of construction progress at the new research facility located at the UVM Proctor Maple Research Center in Underhill, Vermont.

provide storage for up to 5,000 gallons, enough to feed four evaporators simultaneously. The interior of the building will be lined with metal paneling for ease in keeping the area clean to avoid contamination of the research area. Glass piping will be used to feed the evaporators. A custom-designed powered ventilation system will exhaust steam (no cupola!). In addition, a 2 kW solar system, funded by a grant from the State and funds from the UVM College of Agriculture & Life Sciences, will be used to generate electricity that will be fed back into the power grid to reduce building operating costs. We also anticipate experimenting with using biodiesel (B20) to fuel the evaporator. You can keep track of the progress of construction by visiting <http://www.uvm.edu/~pmrc> and clicking on "The Maple Production Research Facility Construction".

Our sincere thanks to all of the individuals, associations and companies who have donated funds for this project. We look forward to conducting and reporting on a number of interesting and exciting experiments in the facility over the next several years.



**65 Charlie Wood Road
Delancey, N.Y. 13752**

Phone: (607) 746-6215

Fax: (607) 746-8367

www.catskillmountainmaple.com

www.catskillmountainmaple.com

Your Complete Maple Equipment Dealer

In Stock: Jugs, Tubing, Glass Containers, Bottlers, Evaporators and Much More

USED EQUIPMENT

3' x 10' wood-fired Waterloo evaporator with new pre-heater and steamhoods — \$4,500

5' x 12' Leader wood-fired evaporator SS syrup pan, tin flue pan, home made hood and pre-heater — \$1650

3 1/2' x 10' Grimm oil fired evaporator with pre-heater and steam hood — \$4,995

Used Poly Truck Tanks, excellent: 210, 375, 475 gal. — \$180, \$220, \$295

3 1/2' x 8' Small Brothers stainless steel hood with built-in pre-heater — \$1,100

Stainless steel syrup pans 4' x 3' and 4' x 5' — \$300 & \$500

6' x 13 1/2' wood chip burner evaporator with pre-heater, stainless steel pans — \$3500

Cream Machine Demo model like new — \$875

1 - Echo gas tapper nice shape — \$225

1 - Echo 1" pump 2 cycle gas — \$225

Check Out Our Website for Updates

NEW YORK STATE LICENSED SYRUP BUYER BARRELS AVAILABLE

sugarhill[®]

MAPLE CONTAINERS

*Contact us
for the
Sugarhill[®]
dealer in
your area.*



*The third in our
“Family Tradition” series...
... Inheriting the Tradition.*

P.O. Box 490 • 262 Millers Falls Road • Turners Fall, MA 01376
Phone: 413/863-2222 • Fax: 413/863-3774
www.hillsideplastics.com

“The Plastic Bottle People”

2006 SAP PRICES

A lot of people have requested that we publish sap prices. What I have found is that sap prices vary greatly depending upon the retail price of syrup.

The retail price of syrup in the Northeast is higher than in the Midwest, hence the price paid for sap is higher in the Northeast. Listed below are sap prices being paid by SOME producers.

Remember these prices are for sap delivered to the sugarhouse.

These prices are intended to be used only as a guide for buying sap and no way intends that they dictate the price for the entire industry.

sugar	\$/gal.	sugar	\$/gal.
1.50	.106	3.60	.411
1.60	.124	3.70	.426
1.70	.143	3.80	.440
1.80	.160	3.90	.453
1.90	.175	4.00	.468
2.00	.190	4.10	.481
2.10	.203	4.20	.495
2.20	.218	4.30	.509
2.30	.232	4.40	.522
2.40	.245	4.50	.537
2.50	.260	4.60	.550
2.60	.273	4.70	.564
2.70	.287	4.80	.579
2.80	.301	4.90	.592
2.90	.315	5.00	.606
3.00	.329	5.10	.619
3.10	.342	5.20	.634
3.20	.356	5.30	.648
3.30	.371	5.40	.661
3.40	.384	5.50	.675
3.50	.398		

UNITS OF MEASURE

MT	=	Metric Tonne
kg	=	Kilogram
ha	=	Hectare
lb	=	Pound
L	=	Litre

CONVERSION FACTORS

1 lb	=	0.45359237 kg
1 MT	=	1,000 kg
1 ha	=	2.47 acres
1 Imperial		
gallon	=	4.546 L
	=	6.023 kg
	=	13.248 lb of syrup
	=	9.2 lb of maple sugar
	=	10.4 lb of maple taffy
1 L	=	0.220 gallon
	=	1.325 kg
	=	2.92 lb
1 lb	=	0.34 L
1 MT	=	2,204 lb
1 US		
gallon	=	3.785 L
	=	11.03 lb

THE MAPLE SUGARING STORY

*About a Proud Tradition of
Northeastern North America*

Video  Illus. Guide

30 minutes  90 pages
\$29.95 Ppd. \$5.50 Ppd.

**INTERNATIONAL AWARD-WINNING
VIDEO TAPE**

Please add 6% Sales Tax for Vermont addresses
Checks, in U.S. funds to:

PERCEPTIONS, INC.

**1030D Hinesburg Road,
Charlotte, Vermont 05445**

Visa/Mastercard: 802-425-2783

Fax 802-425-3628 • email PerceptVT@aol.com

MAPLE PRO



Everything For Your Sugarbush!



SUGAR CREAM MACHINE



TANK OF THE FUTURE



7" and 11" FILTER PRESS



ENFER DALLAIRE



HEALTH BARREL



REVERSE OSMOSIS CDL

Maple Pro

39 Rewes, St. Albans, Vt.
www.waterloosmallusa.com



www.cdl-dallaire.com
802-527-0000 • 800-762-5587

CONTROLLING MICROBIAL POPULATION IN SAP SYSTEMS

Locations: Cornell Uihlein Sugar Maple Research Laboratory, Lake Placid, NY, Arnot Forest, Van Etten, NY and private maple operations throughout New York

Leader: Randy W. Worobo, Associate Professor and Brian F. Chabot, Professor, Cornell University

Objectives

1. To document microbial populations in commercial sap systems.
2. To determine the effectiveness of disinfectants, tubing washing and UV radiation

RESEARCH RESULTS

Objective 1. Microbial populations in commercial sap systems

Over the course of one maple sap season in Western New York that started approximately March 8, 2005 and ended April 9, 2005, four maple sap locations were sampled to determine the levels and diversity of microbial populations contained in the different sap samples. The various sap samples were analyzed for yeast and total aerobic plate counts using acidified Potato Dextrose Agar (PDA) and Plate Count Agar (PCA), respectively. Samples were collected from virgin tapped trees, various points in the tap lines and in central collection points ie. storage tanks. The lowest level of bacteria and yeast were from virgin tapped trees, followed by sap lines and finally collection vessels. This indicates that



MAPLE PRODUCERS

"We stick to what
YOU do best!"

- Sap Wrap • Hang Tags • Grade Labels
 - Neck Tags • Peek-A-Boo • Nips • Foil Stamp
- Labels for all Complementary Products***
- Candy • Pancake Mix • Butter

CUSTOM DESIGNED LABELS

800-639-7092 • Fax : 888-655-4347
www.clov.com ~ email: sales@clov.com

9 Tigan Street • Winooski • VT • 05404

Dedicated to Excellence. Quality and Service

the majority of the contamination that is observed in the sap at the sap house originates from tubing and the residence time from the tree to the boiling pans allows for multiplication of the contaminating bacteria and yeast. Environmental temperature was also observed to have an effect on the levels of bacteria and yeast which was expected. The warmer environment temperatures observed later in the sap season had higher levels of bacteria and yeast. The growth rate of bacteria and yeast increases (doubles every 10°C) as temperatures increase up to the microorganisms maximum growth temperature.

From the numerous samples collected, the bacterial counts were typically higher than yeast counts. The level of bacteria ranged from unde-

tectable (<1 colony forming unit/ml) to a high of 760,000 cfu/ml. From the data, it appears that the wide variation was dependent upon the location it was collected which could be explained by the different conditions of the tubing ie. cleanliness condition, and residence time of the sap. Yeast levels were much lower on average (approximately 2 orders of magnitude) with a range of <1 cfu/ml to a high of 76,000 cfu/ml). Highest levels were observed in collection tanks and later in the sap season.

From the large number of samples taken, the results confirmed the importance of cleaning sap tubing to prevent contamination of sap and the control of the microorganisms during sap holding prior to evaporation either through inactivation ie. thermal processing, UV or ozone treatment of

New - Maple Leaf Line Bottles



Sizes : 100ml, 250ml, 500ml, 32oz, II.

RICHARDS PACKAGING INC.

Dartmouth
Tel. 902-468-8211

Montreal
Tel. 514-697-8690

Quebec
Tel. 418-682-5002

Toronto
Tel. 905-624-3391

dartmouth@richardspackaging.com
quebec@richardspackaging.com

mtlsales@richardspackaging.com
tosales@richardspackaging.com

Web Catalogue : www.richardspackaging.com

the sap; or control of their growth by refrigeration to less than 40°F. Recommendations to limit the residence time in the sap tubing, proper cleaning of tubing and sap contact equipment and possibly an in-line treatment such as UV treatment prior to entering the collection vessel would reduce the level of microorganisms which has a direct effect on the finished quality of maple syrup due to the conversion of the disaccharide sugars (sucrose) normally contained in sap into two monosaccharide molecules (glucose & fructose) that when exposed to heat and low levels of amino groups, form caramelization products that impart flavor and darker color. This type of reaction is called a Maillard reaction.

Objective 2. UV disinfection and tubing sanitization

Currently, sap tubing is not cleaned by a large majority of the maple syrup producers. At most, a high pressure back flush of water alone or in combination with bleach is passed through the tubing systems. The proper cleaning and sanitization of the tubing will prevent the formation of biofilms on the tubing surface which can release microorganisms continually into the sap as it passes through the tubing. For the food industry, a 5 step cleaning procedure is recommended which is as follows:

1. rinse majority of organic contamination out of lines with water
 2. detergent application
 3. water rinse
 4. sanitizer application at correct levels (50-200 ppm free chlorine at pH <6.0)
 5. potable water rinse
- Due to the extensive tubing net-

works, this 5-step procedure is a large time commitment. This is the recommended protocol that the rest of the food industry has to comply with. However, at minimum, a detergent sanitizer as a flush and a final rinse with water would be a minimum. Chlorinated sanitizers showed the broadest spectrum of activity against all bacteria, yeast and molds. The caustic nature of hypochlorites also strips organic build up in the tubing. As a second alternative is hydrogen peroxide as a sanitizer at a maximum allowable level of 1,100 ppm. This is not as broad spectrum of activity and some bacteria, yeast and mold not being sensitive to this sanitizer. The contact time for sanitizers should be at least 2 minutes or as recommended by the chemical supplier to guarantee complete effectiveness.

Detergents should not be carried over for two reasons, firstly, the tubing should be made of food grade plastic which does not allow for leaching of detergents or sanitizers into the plastic. The second reason is that there are three additional rinse steps that will flush all traces of detergent away. Proper detergent and sanitizer levels are extremely important for the effectiveness and preventing any carry over into the concentrated sap. Sufficient volumes of all solutions including water rinses is essential.

Ultraviolet irradiation using a commercial sap treatment system (Sap Steady, FPE Inc., Macedon, NY) was used. A level of approximately 8,000 uWatts of UV exposure was applied to the incoming sap prior to the collection vessel. The UV treatment at this level achieved a 100 fold reduction in bacteria and a 10 fold reduc-

tion in yeast levels compared to the untreated sap at the same time. It was observed that the total levels of yeast and bacteria were lower and the time required to reach the levels of the untreated sap in the collection vessel was significantly extended. This relates to an extended holding time and reduced enzymatic activity that potentially produce darker syrup and more caramelized flavor in the finished syrup.

From this preliminary research, it appears that an in-line UV treatment of sap can improve the microbiologi-

cal quality of sap that is used in the production of maple syrup. It should be mentioned that the finishing quality of the maple syrup will likely not be improved over the quality of the maple syrup that would be made from the incoming maple sap if it were immediately evaporated to the finished maple syrup. In other words, the use of a disinfection step at the point of sap storage will retain the quality of the sap but will likely not improve the quality but will prevent the deterioration of the maple syrup quality.

EVERYTHING ... for the maple producer!

SAP STEADY UV MAPLE SAP STERILIZER FIELD TESTED, PROVEN RESULTS and ONLY at OESCO!



The only UV machine made specifically for maple production!

- Uses a thin layer of sap when exposed to the UV light, allowing for total kill of all bacteria, yeast & mold present at treatment time
- Uses 6 high intensity germicidal UV tubes inside a crystal tube.
- Mounts on sugarhouse wall / Uses standard 120V outlet
- 30 GPM flow is higher than any other UV unit
- 3/4" inlet/outlet can be wired to turn on/off with your vacuum

Poly Tanks, Food Grade Hose & Fittings - order online



GOLDONI MAXTER with a TAJFUN WINCH

Articulating design = a low profile, low impact forest management machine — 63 PTO HP • 4WD

Available with articulated steering (705N)

Front steering model (70RS)

Reversing tractor model (70RS REV)

TAJFUN

Smooth controls & extra heavy brakes makes Tajfun a strong pulling woodlot machine



P.O. Box 540 • Route 116 • Conway, MA 01341
www.oescinc.com

800-634-5557 • 413-369-4335 • Fax 413-369-4431 • info@oescinc.com

CLIMATE CHANGE AND THE NEW ENGLAND FOREST

*From the Massachusetts Audubon
Society, Sanctuary Magazine,
Spring 2005*

Based on models in a regional climate assessment study by the US Global Change Research Program, some scientists believe that within the next one hundred years or so, Boston could have a climate similar to Richmond or Atlanta. These computer models project that the average temperature will rise between 6 and 10 degrees F over the next century. In the next one hundred years New England's cooler regions may no longer promote the growth of sugar

maples, which are well adapted to the region's current climate. The change in climate will support species that now grow to the south of New England and in lower elevations, especially oaks and southern pines. Additionally, there will be the threat of non-native species, both insect pests and invasive plant species which may take over the forests.

According to Barry Rock, Professor of Natural Resources at the University of New Hampshire, "On average, trees can only move their range from 5 to 15 miles over a hundred year period." In the past, natural climate changes occurred over thousands of years. At the end of the most recent glacial period, about 4000 years ago, the forest communities gradually migrated north as the glaciers melted and retreated. The forest

Maple Syrup Grading Meter
HI 95759K
ISO 9001 Certified

- Affordable for All Producers
- Digital Readout
- Easy to Use!

HANNA[®] instruments
With Great Products, Come Great Results™

Maple Refractometer Included!

For more information, contact HANNA Instruments at: (888) 815-6422 • www.hannainst.com
Available through HANNA authorized independent distributors.

communities that developed in front of the glacier gradually migrated northward in its lee.

From 9,000 to 4,000 years ago, the average temperature of New England was nearly 4 degrees warmer than it is today. The climate was similar to modern day Virginia. Now it appears that the engines of the industrial age are taking the global climate into the past. Human activity is responsible for most of the global temperature rise in the past 40 years. This advance rate of climate change may not allow time for the forest to migrate northward. The result may be that balsams and maples will die off, to be replaced by invasive species from the south.

Some preliminary studies have been done by the University of

Vermont on producer data from the past 40 years. It appears that in Massachusetts the start of the sugaring season had advanced slightly less than 5 days to an earlier date, and the end of the season has advanced just over 6 days. This has resulted in a shortening of the "season" by 1.5 days overall. More disturbing is a possible trend of colder lows and warmer high temperatures, which may have the effect of advancing the end of the season even more.

In addition to the sale of maple products and tourism during sugaring season, there is a very important third component to the sugar maple economy of New England — fall foliage. There is a huge economy built around the annual migration of leaf peepers to New England. These

Call or
write for a
FREE
Catalogue!



All Prices
in Low, Low
Canadian
Dollars

"Where Quality and Service is a Tradition"

New & Used Equipment Complete Line of Supplies

RR #1, Oro Station, Ontario L0L 2E0

Tel: 705-487-3331 • Fax: 705-487-0460

Website: www.atkinsonmaple.com

Email: sales@atkinsonmaple.com

A Division of Davtech Industries Ltd.

"WE SHIP DAILY"

famous fall colors, coming mostly from our beloved sugar maple tree, result from the breakdown of chlorophyll, the green pigments that mask orange and yellow pigments. The brilliant red colors, of anthocyanins are actually produced each fall. The first hard frosts, which bring out the most brilliant colors, used to come about the third week of September. In recent years these first frosts have arrived later and later. In both 2004 and 2005 the first hard frost didn't arrive in many New England areas until mid-October. Professor Rock predicts that foliage season will gradually come later and that the intensity of colors will decrease. We certainly got a glimpse of that scenario in 2005.

The overall effects of the coming climate change may prove to be as complex as understanding fall foliage or maple sugaring physiology. How much of the overall drop in health known as "maple decline" is caused by global warming as opposed to acid precipitation? The combined effects of air pollution and climate change are synergistic. Furthermore, global warming is also creating the opportunity for insects, fungi and diseases to invade environments with climates once too harsh for them to survive the cold winters. For example, the Hemlock Woolly Adelgid is being held in check by current cold climates, but that may soon change.

No matter what steps we take, the wheels of global climate change have been set in motion. The real question is how far down that road we'll travel before slowing it down.

WORLD PRODUCTION

Canada and the United States are the only two maple syrup producing countries in the world. In 2004, worldwide production of maple syrup was estimated at 42,783 metric tonnes (MT, with Canada accounting for 82% of that production and the US the remainder. Canada is therefore the largest maple syrup producer with production of 35,248 MT in 2004, valued at C\$149.5 million, while the United States produced 7,535 MT, valued at US\$42.8 million.

Over the last five years, Canada has accounted for 84% of the world's production of maple syrup, while the US has accounted for 16%. The percentages fluctuate slightly from year to year because of variations in yields associated with specific weather conditions each spring. The decline in Canadian production to 82% in 2004 was largely the result of the introduction of a production quota system in Quebec.

Because of low domestic consumption in Canada, the maple industry relies heavily of exports.

CLUTE'S MAPLE PRODUCTS

** Leader and G.H. Grimm
Equipment & Supplies*



**Bacon Jugs*



Lane & Kathy Clute
405 Clute Road
Naples, NY 14512
(585) 374-6371



YOU'RE ONE STOP SHOPPING FOR MAPLE EQUIPMENT & SUPPLIES

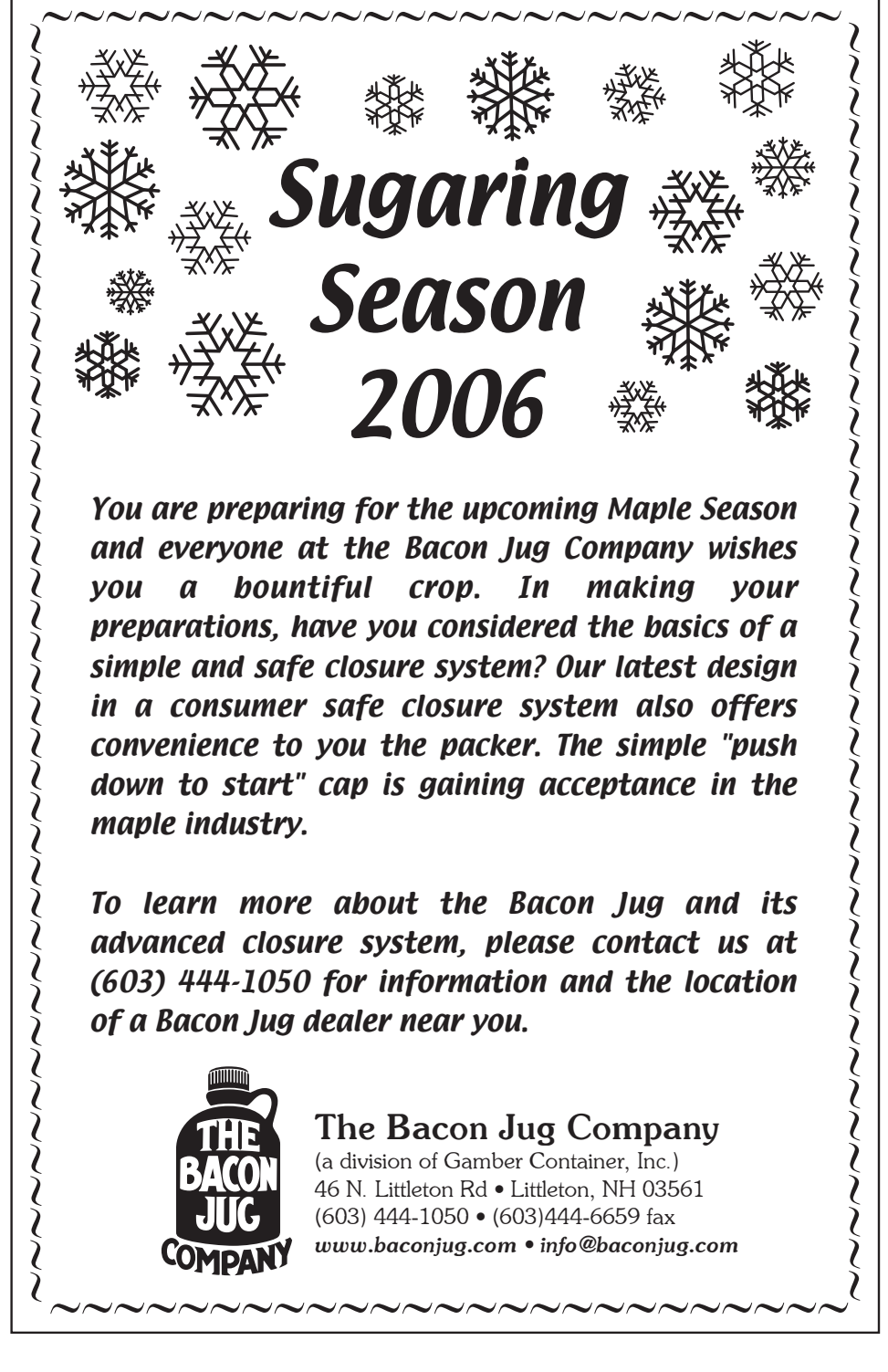
Over 100 years experience in the maple industry
The #1 Manufacturer of Maple Sugaring Equipment in Canada



Evaporators, R.O.'s, Vacuum Pumps, Sap Tanks,
Tubing, Mainline, Air Injector for pans, Glass & Plastic containers

D.G. USA Inc
Dominion & Grimm Inc.

164 Yankee Park Rd
Fairfax, VT 05454
Tel: 802-524-9625
Fax: 802-524-9643

A decorative border of various snowflake designs surrounds the central text and the main body of the advertisement.

Sugaring Season 2006

You are preparing for the upcoming Maple Season and everyone at the Bacon Jug Company wishes you a bountiful crop. In making your preparations, have you considered the basics of a simple and safe closure system? Our latest design in a consumer safe closure system also offers convenience to you the packer. The simple "push down to start" cap is gaining acceptance in the maple industry.

To learn more about the Bacon Jug and its advanced closure system, please contact us at (603) 444-1050 for information and the location of a Bacon Jug dealer near you.



The Bacon Jug Company

(a division of Gamber Container, Inc.)

46 N. Littleton Rd • Littleton, NH 03561

(603) 444-1050 • (603) 444-6659 fax

www.baconjug.com • info@baconjug.com

CLASSIFIED

FOR SALE: Equipment & Supplies from Bakers Maple. Lamb tubing, Bacon jugs, Marcland controls, Carrageenan for maple jelly, 1 1/2 lbs. for \$19.95. Used Beckett CF 2300 Oil Burner, used syrup pans. Bainbridge, NY (607) 967-7229.

FOR SALE: 1994 4' x 14' Thunderbolt evaporator with Piggyback. Like new, used only 3 years, asking \$1,300. (231) 869-2018.

COMING EVENTS

16th ANNUAL HEBRON MAPLE FESTIVAL

March 11 & 12, 2006

10:00 AM - 4:00 PM

For more information contact:

www.hebronmaplefest.com or e-mail: ccy1@juno.com

20th MAPLE SYRUP FESTIVAL

March 11-12, 2006

Warkworth, Ontario, Canada

For more information contact:

Alice Potter Tel: (705) 924-2057 Fax: (705) 924-1673

STURBRIDGE AREA MAPLE DAYS

March 17-19 and March 24-26, 2006

Sturbridge, Massachusetts

For more information contact:

Lee Schelin at Phone: (508) 347-0210, Fax: (508) 347-0375

NAMSC/IMSI ANNUAL MEETING 2006

October 18-21, 2006

Green Bay, Wisconsin

For more information contact:

Gretchen Grape at: Phone (715) 447-5758, Fax (715) 447-5745

E-mail gretchen_grape@yahoo.com

IN MEMORIAM

GENEVIEVE M. (EVERTS) ROLOSON

Genevieve M. (Everts) Roloson, 82 of Columbia Cross Roads, Pennsylvania passed away on Saturday, September 24, 2005 at Troy Hospital in Troy, PA. She was born on March 11, 1923, the daughter of the late Walter and Agnes Everts. Genevieve was a member of the Sylvania Presbyterian Church, the Sylvania Ladies Aid and a member of the Endless Mountain Maple Producers Association. Genevieve is survived by her husband, Lawrence M. Roloson; sons, Ralph E. and Connie Roloson, Martin W. and Louise Roloson, Dale L. and Kathy Roloson and Alan L. and Roxanne Roloson, all of Troy; brother, Hartley of Troy; 12 grandchildren, 22 great-grandchildren, several nieces and nephews. Memorial contributions in Genevieve's name may be made to the Sylvania Lions Club, PO Box 5, Sylvania, PA 16945 or the Endless Maple Producers Association, c/o Andy Dewing, HC 34, Box 31, Warren Center, PA 18851.



MAPLE SYRUP AND SUGAR LABELS

Show the quality, increase the value of your products with quality customized labels

Choose from 4 colorful designs and 2 shapes,
Nutrition facts, bar code labels,
gift tags & more...

Order quantities of 500 and up.

For more information see our website
or contact Diane at:

Techni-Flex, Inc.®
P.O. Box 1075 • Appleton, WI 54912
Phone (920) 757-0155 • Fax (920) 757-0160
e-mail - diane@techni-flex.com
www.techni-flex.com

WE ACCEPT



SUBSCRIPTION FORM

THE MAJORITY OF THE STATE ASSOCIATIONS INCLUDE
THE MAPLE SYRUP DIGEST WITH YOUR DUES PAYMENT.
PLEASE CHECK WITH YOUR ASSOCIATION
TO SEE IF YOU WILL AUTOMATICALLY
RECEIVE THE DIGEST WHEN YOU PAY YOUR DUES.

I would like to subscribe to the MAPLE SYRUP DIGEST

USA () 1 Year \$5.00

CANADA () 1 Year \$7.00

PLEASE REMIT IN US FUNDS

This is a: () new () renewal subscription

Name _____

Address _____

Make checks payable to Maple Syrup Digest and Mail to:

MAPLE SYRUP DIGEST
PO BOX 240, CANTERBURY, NH 03224
(603) 783-4468

BE SURE TO SEND US YOUR CHANGE OF ADDRESS
THE POST OFFICE *WILL NOT* FORWARD BULK MAIL!

DEADLINE
FOR
NEXT ISSUE
MAY 1,
2006

IF YOUR
MAILING LABEL
READS
SF06

Subscription ends February 2006

THIS IS
YOUR LAST PAID ISSUE
Please renew your subscription

PRESSURE FILTER

From "Wes Fab"

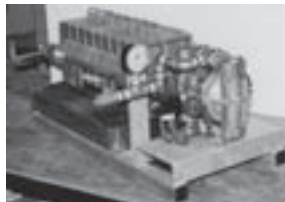
For the Hobby to Commercial Producer - Small to Large Capacity.



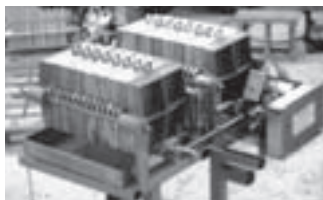
7" Hand Pump Model

7" Short stack filter press hand pump or electric.
Hand pump model has more capacity than other hand pump filter presses.
Uses standard 7" filter papers.
Food grade pump & stainless steel fittings.
Electric motor model is designed to expand by adding more plates & frames.

Reliable electric motor driven pumps
7" Press available with 3 - 8 frames
10" Press comes with 4 - 8 frames
Highest capacity filter of this type
Fast heating, easy cleaning
compact, lightweight



Full Size 7" With Optional Diaphragm Pump Shown



10" Double Bank Electric Gear Pump Model

Double Bank Filter Press
For continuous production without shut-down
Same materials as our reliable filters above
Available with optional long life diaphragm pump

Contact Us for your special filtering requirements
or for the name of your local dealer

WES FAB
WES FAB INDUSTRIES

Wayne "Wes" E. Schoepke, Jr.
14420 12th Ave. Merrill, Wisconsin 54452
(715) 536-0501