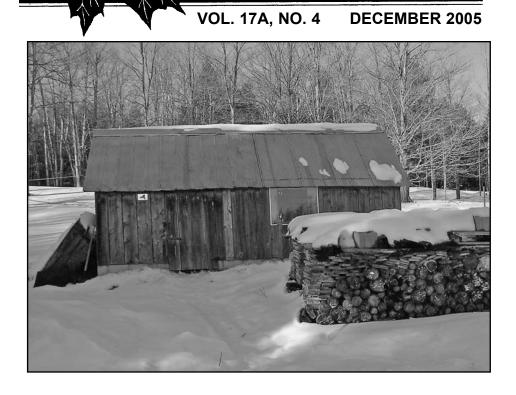
# Maple Syrup Digest



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

Maple Syrup Digest PO Box 240 Canterbury, NH 03224





While we are greatful for the business throughout the year, at this time we extend our appreciation and wishes for a prosperous sugaring season for all!



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.mclures.com
info@mclures.com

## 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 \$1,800 pan 2' x 5' Evaporator w/Grimm arch & stainless flat pan 750 2' x 9' Evaporator w/stainless flat pans and new stack \$1,200 2' x 6' Oil fired evap. w/insulated arch, oil burner, new stack & stainless flat pan \$1,950 2 1/2' x 8' Oil fired evap. w/ insul. arch, oil burner, new stack & \$3,850 Small Bros. stainless pans 4' x 12' Evap. w/Leader arch, Waterloo stainless pans (new welded raised flue pan & soldered

cross flow syrup pans) \$4,400 5'x5' Stainless raised flue pan \$ 950 5' x 5' Stainless hood (like new) \$ 500 500 Gal. stainless bulk tank w/manhole cover \$ 800

6' x 16' Set of King welded pans (new in 1999) \$5,600

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



#### 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: debbi1612@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: stamandrj@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: Ilussier@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

Classified

#### SUBSCRIPTION RATES

 2 Page Spread
 \$450.00
 United States
 1 year - \$5.00

 Full Page
 240.00
 Canada, US funds
 1 year - \$7.00

 1/2 Page Vert. or Horz.
 135.00

 Column Inch
 19.00
 COVER: Sugarhouse of Marc &

70c per word

**COVER:** Sugarhouse of Marc & Cheryl Kenyon, Thurman, NY.

#### GREETINGS FROM YOUR PRESIDENT



Dear Fellow Maple Producers,

The 46th Annual meeting of the North American Maple Syrup Council is history. I hope those that attended meeting in Trois-Rivieres. Quebec, had as much fun as I did, renewing friendships, learning, sharing ideas and practicing my French. Mv thanks to the Organizing Committee, Cecile Pichette, Luc Lessier, Rene Ares, the Board of directors of Citadelle and everyone that helped plan and carry out the meeting. I haven't figured out what was the best part (maybe the dinner at Aux Mille Erables Sugarbush) or what impact the discussion of tap hole size and wound by Brian Chabot and Centre ACER will have for me when tapping next spring, but I do know I had a great time. In the printed program, there was a list of all the NAMSC meetings and past presidents. I counted the number of meetings I have attended - it certainly doesn't seem like nineteen. The list of past presidents was equally revealing. It is a list of leaders, men that guided NAMSC through good and bad syrup years; changes in how sap is collected and boiled; issues with insects, disease and lead. They provide to me, the 24th president, an example of meeting the challenges as they occur, head on. And the challenges and changes will be occurring. Changes in how NAMSC membership is structured, the direction of the Research Fund, and the challenge of continuing to produce a quality product are just some of the issues before us.

A president has advisors. Mine are the Board of Directors and the executive committee. And you, the maple producers of North America. In the front of the Maple Digest, all of the names, phone numbers and addresses are listed for the delegates and officers of NAMSC. We can only act on issues, suggestions, and ideas if you let us know what they are. Feel free to call me or drop me a short note with your ideas, comments and suggestions.

I would like to extend my sympathies to the New York and Michigan Maple Producers. Both groups, as well as the maple industry, recently lost long time supporters and promoters of maple. Lew Staats, New York and Cal Reetz, Michigan will be greatly missed.

Finally, with the Holiday season upon us, I encourage each of you, as you fill those bottles, tins and jugs, to keep count and donate the penny per container to the Research Fund. Without your dollars, research important to our industry won't occur.

Yours in Maple, Beth Collins

#### 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

Winter arrives and sugaring isn't far behind. To hear all the talking at the October annual meetings of the North American Maple Syrup Council and International Maple Syrup Institute, you'd have thought that sugaring was just around the corner. Actually, once you get this issue in the mail, it will be just around the corner.

On our tour stops of Quebec sugar makers we talked of tapping, starting just after New Years. "When you have 25,000 or more taps to do alone with your wife, you start early." I'm sure that some of the visitors were shaking their heads at starting this early, but it seems to work for these producers up in the maple regions of Quebec.

Highlights of these international meetings have been for many years, the technical sessions that are put on by maple researchers from around the U.S. and Canada. This year there were many such sessions, including presentations by the Proctor Maple Research Center (A comparison of Three Tubing Manufacturers' Equipment Installation Methods) in Vermont, Centre Acer (Air Injectors in Maple Syrup Production) in Quebec, Climatic Change: Creeping Environmental Impacts o the Sugar Maple Industry, Cornell University (What's Happening With Tap Hole Size), and lots more.

Tours to various sugar camps were looked forward to, those tours included a tour of the Plessisville, QC Citadelle Maple Producers Cooperative. With more than 2,000 members in Quebec and New

Brunswick, this is one of the largest maple handling facilities in the world. They market under the Camp, Citidelle labels and several private labels. One of the most exciting tour stops was at sugar camp of the Angelo Trepanier family in St. Thecle, QC. This sugar camp host meals for seven weekends each spring, they served nearly 15,000 suppers during last springs season. With about 26,000 taps they sell the majority of their crop to visitors at these sugarhouse suppers. The remainder goes Citadelle Maple the Svrup Producers Cooperative. A great attraction for sugar makers, as well as the great supper, was their antique maple collections. Trepanier has a collection of some 425 chain saws, all in running order. Many go back more than 50 years.

More than 250 persons participated in these events. Make plans for the 2006 annual meetings, to be held in Green Bay Wisconsin in October, 2006. Details will be announced as they become available. There will be a bus tour from Vermont (New England) to Green Bay, contact Larry Myott to make sure you are on the list to receive the information.

Attending these events is a good way to know what is happening in the international industry that affects all maple producers. You can keep up with the technology, social with other sugar makers and dream of all the changes you can make in your own operation. Although it is not possible for everyone to attend these international session, I highly recommend that producers attend their own local sessions. There are some really great maple schools in many of the

states and provinces. One of the best will the Verona, New York session the weekend after New Years. Yours truly will be participating in two sessions there, one on pricing for retail, the other on a look at the international industry.

## LYNN RENOLDS INTERNATIONAL MAPLE LEADERSHIP AWARD PRESENTED

Three Rivers, Quebec---IMSI president Debbie Richards of Ohio (left) presented the Lynn Reynolds International Maple Leadership Award to Richard Norman of Connecticut at the recent annual meetings of the IMSI and North American Maple Syrup Council. He is shown here receiving the plaque from Larry Myott, Executive Secretary of the IMSI. Richards read the following citation:

"This annual award is presented to an outstanding individual each year in honor of Lynn Reynolds, a past President and past executive secretary of the IMSI. He died suddenly in 1998."

"The IMSI seeks, from its members, nominations for the Lynn Reynolds International Maple Leadership Award. The recipient is to be, or have been, within the last five years, very active in the international industry. A committee of the executive officers of the IMSI makes the final selection."

"This years honoree did not come from a maple background, but has been very active on the local scene for more than 25 years, and on the international scene for about 20 years. This hard working maple person has served on numerous committees of the NAMSC and the IMSI.

and as a very energetic chair of some of those committees. This has required a lot of traveling and time for someone who doesn't represent a large maple state province. With this responsibility has also come, serving the NAMSC as president for two years. Several years ago this person was inducted into the American Maple Museums Maple Hall of Fame in Croghan, NY."

"It is my pleasure, as president of the IMSI, to present the 2005 Lynn Reynolds International Maple Leadership Award to Mr. Richard Norman, of Woodstock, Connecticut."

#### **PLAQUE AWARDED**



Three Rivers, QC -- Joe Polak, Wisconsin, and secretary of the NAMSC presented retiring President Roger Sage of New York a special plaque in thanks for his two years of service. Here Roger is responding and looking rather happy. (Larry Myott Photo)

(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)



#### 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

## Making Maple Syrup in a Land of Funnel Cakes and Pulled Pork

By Mike Rechlin Principia College

In collaboration with: Hans Michielen
Paul Smith's College

Maple syrup country invokes an imagery of snowshoeing through snow-covered woods to tap out, horse drawn sap sleighs, and steam rising in the cold night air. In 1999 I left that world, and a 20 plus year career with the Forestry Division at Paul Smith's College in the Adirondacks of New York State, to take a new job with the Biology Department of Principia College in southern Illinois. Paul Smith's runs a 1, 400 tap sugar bush and offers students the opportunity to take a sugar bush course as part of their forestry education. I had for years tapped 15 to 20 trees on the hill beyond my home on Osgood pond; cooking up enough syrup for my family's needs. Upon hearing that sugar maples could be found in the cool moist ravines of southern Illinois' predominantly oak-hickory forests, I packed up 17 sap buckets, a few handfuls of spiles and headed south. This article is based on the observations and experiences of a "north country refugee" making maple syrup near the southern end of the sugar maple range.

Principia is located on the bluffs overlooking the Mississippi River, approximately 30 miles upstream from St. Louis, Missouri. In the past five years those 17 buckets have grown to a student run sugar bush of 140 taps, with the sap being concentrated on a Hobby Special evaporator. The syrup produced is sold in the College's bookstore. After arriving, I found one other small-scale producer, Mason Hollow Maple Syrup, four miles away in the town of Grafton, Illinois. Richard Hindelang and Fred Venardos put in approximately 165 taps, and have been sugaring for the past 11 years. The nearest large scale commercial operation is in the middle of the state, 150 miles north. Just outside of Bloomington-Normal is the home of Funk's Grove Maple Syrup. Mike and Debbie Funk tap 7,500 trees in a maple stand that has been part of a family sugaring operation since 1891. Funk's Grove is as high a production and technologically up-to-date a sugaring operation as anything you would find in New England.

The good news from the near south is that, although the "Mason Hollow boys" don't sound much like those New England farmers, sap does, in fact, boil in this country just about the same as it does up north. From there on, though, differences begin to emerge. In southern Illinois, getting sap out of the trees and into the sugarhouse proves to be more of a challenge. In this article we compare weather patterns and production records of the Principia College sugar bush to that of Paul Smith's College for the past three sap seasons. The

contrasting data presented illuminates the problems of sugaring just north of the Mason-Dixon line. Now if global warming is more fact than fiction, what we deal with down here may be a glimpse into the future that you northern folks can expect to see coming your way. And, as you will see, it might not be as sweet a future as you expect.

#### DATA ANALYSIS AND DISCUSSION

The most noticeable difference between sugarin down here and up north is that we are tapping out the third week of January, a time when you northern folks are still thinking about ice fishing. During the three years of this study, Paul Smith's had a very consistent syrup production. Principia's production, on the other hand, varied wildly (Table 1). Production differences can be attributed to three factors; the number of freeze-thaw cycles, length of the sap season, and consecutive days with above freezing temperatures. For this analysis a good freeze-thaw cycle was defined as a day when the temperature reached 40° F or higher, and was preceded within a day by a low of at least 25° F. Temperature data for this study was collected at the respective College's weather stations, with area national recording sites filling in any missing information.

The 2003 sap season at Principia was an exceptional year. As seen in Table 1 the Principia sugar bush produced 1.32 quarts of syrup per tap, way outpacing the 0.78 quarts per tap of Paul Smith's. I thought I had landed in maple syrup heaven. Both Principia and Paul Smith's had 15 freeze-thaw cycles that year. However, to get those 15 cycles we had a 16 day longer season.

The next year was just the opposite. While Paul Smith's produced 0.87 quarts per tap, Principia produced only 0.37 quarts per tap. We had only four freeze-thaw cycles conducive to good sap runs as opposed to the 16 cycles at Paul Smith's (Table 2), and, as shown in Table 3, we also had a six day period in February when the temperatures never dropped below freezing. The 2005 season again brought us close to Paul Smith's in syrup production. But this year our meager eight freeze-thaw cycles were spread out over a 49-day period. Paul Smith's had 15 cycles within a 27-day season.

Table 1. Sap season and production from the Principia and Paul Smith's Sugar bush operations.

Sugar bush	Year	Tapped	First	Last	Seas.	No.	Gal. Qts./Tap	
			Run	Run	Length	Taps	Produced	
Principia	2003	1/16	1/28	3/12	44	106	35	1.32
	2004	1/23*	1/23	2/18	27	130	12	0.37
	2005	1/18**	1/20	3/9	49	145	27.6	0.76
Paul								
Smiths's	2003	3/11	3/19	4/15	28	1,300	255	0.78
	2004	3/9	3/11	4/17	38	1,400	304.8	0.87
	2005	3/15	3/21	4/16	27	1,400	276.9	0.79

<sup>\*</sup>Reamed holes 2/10/04 \*\*deepened holes 3/3/05

Note: The Paul Smith's bush is on vacuum whereas the Principia bush is not.

Table 2. Freeze thaw cycles during the sap season

Sugar bush	Year	Jan.	Feb.	Mar.	April	Total
Principia	2003 2004 2005	4 1 2	5 3 3	6		15 4 8
Paul Smith's	2003 2004 2005			9 6 7	6 10 8	15 16 15

One of the daunting challenges in running a sugar bush in southern Illinois can be seen in Table 3. Sap runs at Principia are interspersed with extended periods of above freezing temperatures. Whereas a sugar bush may freezeup for extended periods in the north, down here it is just as likely to warm-up for extended periods. During those warm spells the microorganisms and the tree defenses are working overtime to seal the tap holes. Single 24-hour periods with temperatures above freezing do not seem to have much of a negative effect. The Paul Smith's sugar bush experienced multiple single day warm-ups in each of the three years, and Principia's bush had 5 single day thaws in our bumper year of 2003. The poor 2004 season, however, was another story. The season only lasted 27 days, during which we had six consecutive days of above freezing temperatures. With so little sap collected, and in desperation to bring in some sap for the students to boil, we reamed out our tap holes after the six-day thaw. This was done by initially tapping with a 3/8ths bit and then coming back to drill again with a 7/16ths inch bit. The reaming was close to totally ineffective in increasing sap flow.

The 2005 season again saw Principia with two three-day thaws, and two four-day thaws. During this 49-day season, we had only eight freeze-thaw cycles conducive to producing good sap runs; far short of the 15 cycles they had at Paul Smith's. Even with these conditions, though, we had an acceptable production of 0.76 quarts per tap. What saved the day at Principia was a tapping innovation. Remembering the ineffectiveness of the reaming exercise the year before, we initially drilled our tap holes only two inches deep with a 3/8ths inch bit. Tapping guidelines call for tap holes to be drilled 2½ to three inches deep. In early March we came back with a 7/16ths inch bit and deepened each hole to three inches. The extra inch of depth exposed fresh sapwood, significantly increasing sap flow. We were able to catch two good sap runs in March; runs that our neighbors at Mason Hollow, who relied on reaming their holes, missed.

Now, that may work just fine on a student run sugar bush, where labor is plentiful and free. However, for those of you with taps numbering in the thousands, the thought of deepening all your tap holes to rescue a season should cause more than a little concern.

Table 3. Consecutive Days Above Freezing
(Daily high and low temperatures above 32<sup>O</sup>F)

	Year	Month	1	2	3	4	5	6	7
Principia	2003	Jan	1						
		Feb	2		1				
		Mar	2						
	2004	Jan							
		Feb						1	
	2005	Jan	1						
		Feb	1		2	1			
		Mar				1			
Paul Smith's	2003	Mar	3	1					
		Apr	1						
	2004	Mar	1						
		Apr	1						
	2005	Mar	1						
		Apr	2	1					·

#### CONCLUSIONS

As you can see, making maple syrup in the mild climate of southern Illinois is less predictable and more work. The sap seasons are longer, there is an almost certain need to freshen the tap holes, and the freeze-thaw cycles are less predictable. You can have bumper crop years, but you can also have years where production is miserably low, with a short sap season and few freeze-thaw cycles. The good news, however, is that the economic law of supply and demand is on our side. We can sell a 12-ounce bottle of Principia's finest maple syrup for \$10, and have trouble meeting demand. After deducting the cost of the bottle and labels it leaves us with a "profit" of 71 cents an ounce, bringing in a cool \$90.88 per gallon.

If our climate is heading your way though, and it just hardly seems worth the effort to continue, there are some options out there. During those long warm periods without a sap flow, I have often thought of just filling that front pan with cooking oil and frying up a mess of those good Mississippi catfish. Of course, then again, you could always just decide to re-plumb the thing and evaporate a little corn.

OBERDORFER
BRONZE GEAR PUMPS
1/2" Model #4000-B
\$174.00

MONAHAN PUMP SUPPLY, INC. 271 LEE BURBANK HIGHWAY, REVERE, MA 02151 Telephone: 781-286-6450 • Fax: 781-286-6941





Division of Lapierre, Waterloo, Small, Inc.

**Lapierre USA has** ioined up with Corev's **Maple Services for** tubing installation.

Call for estimates on vour sugarbush today!

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

CONNECTICUT Litchfield

Hill Jack Sugar Shack Iesse & Iim 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 Gorham Merrifield Farms

Lyle & Jo-ann Merrifield 207-892-5016 Vasselboro

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 Misty Maple Sugarhouse 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

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

#### Contributions to the NORTH AMERICAN MAPLE SYRUP COUNCIL RESEARCH FUND Contributions from 9/1/04 to 8/31/05

The North American
Maple Syrup Council
would like to extend their thanks
to those who have contributed to the
NAMSC - Research Fund through the
"PENNY PER CONTAINER" program
from September 1, 2004
to August 31, 2005.

Contributions can be made through your container manufacturer or supplier or sent directly to the North American Maple Syrup - Research Fund in care of Kay Carroll, Treasurer, 79 East Chestnut Hill Road, Litchfield, CT 06759. Phone: 860-567-3890, E-Mail: kaycarroll@aol.com. Please make checks payable to: NAMSC - RESEARCH FUND.

25,000 Gifts Inc. Queechee Gorge Gifts White River Jct., VT Adirondack Gold Medal Farm, Athol. NY Adirondack Maple Co., Fonda, NY Alden Dana, Hartland, VT Apple Gate Farm, Canton, CT Arlow Sugar House, Granby, CT Atkins Fruit Bowl, Amherst, MA Bailey's Maple Syrup, Storrs, CT Bascom's Sugar House, Alstead, NH Bean Hill Farm, Northfield, NH Berkshire School, Sheffield, MA Berliner Plastics, Lake Luzerne, NY Black Creek Farms, Croghan, NY Blue Heron Farm, Charlemont, MA Boyden Valley Farm & Wine, Cambridge, VT Bradway Sugarhouse, Stafford Springs, CT Bragg Farm, E. Montpelier, VT Breakneck Ridge Farm, Blanchard Twp. ME Breeneman's Maple Syrup, Salisbury PA

Brian Olson, Moodus, CT Broadview Maple Farm, Lyndonville, VT Brookside Farm II, Litchfield, CT Bureau's Sugar House, Old Lyme, CT Burman Maple Products, Thompson, PA Burton Chamber of Commerce, Burton, OH Button's Maple Products, East Freetown, NY C & C Sugar Bush, Pengilly, MN Catskill Mountain Maple, Delancey, NY Charles Drake, Windsor, CT Charles Wagner, Chrivitz, WI Charlies Sugarhouse, Greene, RI Cornell University, Ithica, NY Countryside Hardware, DeRuyter, NY Dale Young, Granby, CT Davenport Maple Farm, Shelburne Falls, MA David Leff, Collinsville, CT Donald Dodd, Niles, MI Dudley Harrison, North Branford, CT Dutton's Sugar House, Washington, CT Elsie's Daughter, Huntington, VT Emerson's Dairy Farm, Alfred Station, NY Endless Mt. Cabin, Rome, PA Eristen Bros. Maple Prod., Mt. Gilead, OH Fideldy's, Cohasset, MN Flaherty's Maple Products, Cooksburg, PA Flyway Farm, Medina, NY Fraser's Vt. Maple Products, Putney, VT Fresh Winds, LLC, Westford, VT Frost Valley YMCA, Claryville, NY Frosty Maple Products, Southampton, NS Funk Grove Maple, Shirley, IL Gillespie, Waterville, VT Girard's Sugar House, Michael Girard, Simsbury, CT Glenna Farms, Inc., Amery, WI Goodrich's Sugar House, Cabot, VT Green Mt. Sugar House, Ludlow, VT Green's Sugarhouse, Poultney, VT Haigh's Maple Syrup & Supplies, Bellevue, MI Hamley's Maple Farm, Barton, NY Hardwick Sugar Shack, Hardwick, MA Harold Cable, Morris, CT Heather Nye, Preston, CT Hidden Pond Sugarhouse, Ron Kasulaitis Simsbury, CT Hillside Plastics, Inc., Mr. Chris Russo, Turners Falls, MA Hillside Plastics, Inc., Mr. Richard Haas, Turners Falls, MA Hilltop Boilers, Newfield, ME Holdridge, Alden, Ledyard, CT Houston's Sugarhouse, Cabot, VT

Indian Creek Sugar Camp, Dayton, OH

loka Valley Farm, Hancock, MA Ivan Puffenbarger, Blue Grass, VA James Woodrow, Hermon, NY Jesse Remington School, Candia, NH Joe Tomanek, Smithsville Flats, NY Joel Afdahl, Baldwin, WI Johnson's Pure Maple Syrup, Orange, MA Junita College, Huntingdon, PA Justis Asthalter, Parksville, NY K.E. Farm and Sugarhouse, Sturbridge, MA Kasulaitis Farm & Sugarhouse, New Hartford, CT Keim's Maple Supply, Homerville, OH Kennedy Farms, Omemee, ON Kinney Maple Supplies, Thorndike, ME Kivela Sugar Bush, Brantwood, WI Klaiber Hardware, Wattsburg, PA Lansing Burdick, Stephentown, NY Lead Mine Sugar Shack, St. George, WV Leader Evaporator Company, Inc., Mr. Gary Gaudette, Pres., Saint Albans, VT Leonard's Sugar House, N. Canton, CT Loch's Maple Syrup, Springville, PA Longview Forest Products, Hancock, NH Lookaway Farm, Springfield, VT LSP Promotions, New London, NH Maine Printing Co., Portland, ME Malcom McKenzie, Naples, NY Maple Acres, Kewadin, MI Maple Crest Farm, Buckfield, ME Maple Hill Farms, Cobleskill, NY Maple Syrup Prod. Assn. of Connecticut, Hebron, CT Maple Syrup Supplies, Pottersville, MI MapleCrest, Underhill, VT Marguardt Tree Farm, Tigerton, WI Massachusetts Maple Producers Assn., Chester, MA McLure's Honey & Maple, Littleton, NH Mead's Maple Syrup, Canaan, CT Merle Farms, Attica, NY Milrov Farms, Salisbury, PA MKS Enterprises, Inc., Norwood, NY Moonlight Maple Co., Mt. Vernon, ME Moosewood Hollow, LLC, Plainfield, VT Morse Farm Maple Sugarworks, Montpelier, VT Muscle in Your Arm Farm, Etna, NY Native Harvest, Ponsford, MN NH Maple Prod. Assoc., Loudon, NH New York County Harvest, Taylor, NY Nod Road Sugarhouse, Avon, CT Norman's Sugarhouse, Woodstock, CT North Country Corp, Cambridge, MA North Hadley Sugar Shack, Hadley, MA

Northfield Mt. Herman School, Northfield, MA October Farm, Rumson, NJ Oliver Scranton, Guilford, CT Osborn Family Sugarhouse. Boscawen, NH Owens Boys Sugar House, Stewartstown, NH Passardi Maple Products, Willington, CT Paul M. Hughes, Bloomfiield, CT Paul Smith College, Paul Smiths, NY Pearl & Son, Loudon, NH Pomeroy Sugarhouse, Westfield, MA Potter-Tioga Maple Producers., Mainsburg, PA Pratt Paper Company, Marblehead, MA Ragland Farm, Southbury, CT Raspberry Patch Farm, Ashfield, MA Rathbun's Maple Syrup, Whitehall, NY Red Bucket Sugar Shack, Worthington, MA Rich Gallacher, Westbrook, CT Richard's Maple Products, Chardon, OH Rick's Sugarhouse, East Hampton, CT Robinson, Bill & Suzanne, Auburn, ON Rock House Maple, Easton, CT Rocky Ridge Orchards, Danby, VT Roger Sage, Warsaw, NY Russell's Maple Farm, Rome, PA Schoonmaker, Winsted, CT Simcoe and District Maple Syrup Prod. Assoc., Rosemont, ON Simscroft-Echo Farms, Michael Girard, Simsbury, CT Smith's Maple Products, Skowhegan, ME Somerset County Maple, Salisbury, PA Southface Farm, Tom McCrumm, Ashfield MA South Meadow Farm, Lake Placid, NY Spragues Maple Farms, Portsville, NY Spring Farm, Colrain, MA Spring Hill Sugar House, West Kingston, RI St. Pierre's Enterprises, Fairfield, VT Stafford Hollow Sugar Shack, Stafford Springs, CT Steve Broderick, Eastford, CT Stonewall Farm, Keene, NH Strawberry Hill Farms, Skowhegan, ME Stroup's Pure Maple Syrup, Kane, PA Sugar Bush Creek Farm, Middlefield, OH Sugar Tree Country Store, McDowell, VA Sugar Tree Farm, LLC, Northford, CT Sugarbush Farm, Woodstock, VT Sugarwoods Farm, Glover, VT Sullivan's Sugar House, Bridgewatrer, CT Sunnyside Maples, Gilmanton, NH

Northern Wisconsin Maid, Park Falls, WI

Sunridge Maple Sugar House, Sunridge, ON Sweet Retreat, Northfield, VT Sweetridge Maple Shop, Forestville, NY Taconic Outdoor Education, Cold Spring, NY Tamarack Farm, Canterbury, NH The Corse Farm, Whitingham, VT The Sugar Shack, Millinockett, ME The Warren Farm & Sugarhouse, N. Brookfield, MA Thomas Bell Lumber, Riverton, CT Toad Hill Maple Farm, Athol, NY Top Stone Farm, West Redding, CT Troy Firth, Spartansberg, PA Trudell Family Farm, E. Fairfield, VT Twin Maple Farms, Middlefield, OH Vallee Farm, St. Albans, VT Vermont Maple Outlet, Jeffersonville, VT Vermont Maple Sugar Makers Assoc., Montpelier, VT Ward's Maple Products, Smithville Flats, NY Wayne Juniver, No. Branford, CT Wettemann Farm, Guilford, CT

Wheeler Farm, Wilmington, CT

William Hiller, Jr., Winsted, CT

Gonvick, MN

Wildwood Farms. David Wentworth.

Williams Farm, Inc., Deerfield, MA Windy Hill Farm, Goshen, CT

Wolcott Maple Equipment, Dale, NY

Wood Homestead Maple, Stamford, NY

### THE MAPLE SUGARING STORY

About a Proud Tradition of Northeastern North America

Video 30 minutes \$29.95 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 PerceptiVT@aoi.com

## 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

## RINGTECH

#### Reverse Osmosis Machines



#### The Best Service and Support

Local, factory trained Technicians

#### The BEST Design Characteristics

The patented all S/S 2 stage pump supplies both pressure and recirculating using only one motor, cutting power costs, and lowering maintenance expenses. Integrated wash tank on the machine. In-line prefilters on the machine. Auto Start/Stop feature on the machine. Compact on a frame with wheels.

#### Illustrated Instructions on the Machines Panels

#### Faster, Higher Flow Rinses

Rinses at 30gpm (8x40 membrane) That's 40-50 percent higher than the competing models which drastically reduces cleaning times

#### Lower Operating Expenses

Less Motors = Less Power

Prefilters are rinsed and washed for longer life cycles.

All S/S Pump components lower chance of future maintenance.

The Maple Industries BEST Warranty

The Maple Industry Leader in Quality, Service and Customer Satisfaction, Guaranteed!

#### BIG NEWS from Leader Evaporator Company, INC

Leader Evaporator Company has purchased a new facility in Franklin County, Vermont. The 85,000 square foot building will be the company's new home with the store and offices opening in

early January, 2006 and manufacturing to follow by mid spring. The new facility will feature the maple industry's largest inventory, store, and showroom in the United States. Along with the only complete line to equipment manufactured in the United States of America. This move will allow us to better serve sugar makers with the products and services that they need. For more information as it becomes available check out our web site:

www.LeaderEvaporator.com



25 Stowell Street St. Albans, VT 05478

802-524-4966 Fax: 802-527-0144

www.LeaderEvaporator.com

## Currently Scheduled New York Maple Educational Opportunities for Winter of 2006

**January 6-7** NYS Maple Conference - Verona (See the Maple Conference Notice for Registration Information).

January 14 Lewis County Maple School, Contact: Michele Ledoux, Cornell Cooperative Extension Lewis County, 5274 Outer Stowe Street, P.O. Box 72, Lowville, New York 13367, Phone: 315-376-5270.

January 21 Western NY Maple School, Contact: Cornell Cooperative Extension of Wyoming County, 401 North Main Street, Warsaw NY 14569, 585-786-225.

January 28 St. Lawrence Maple Expo, Contact: Steve VanderMark, 1894 State Highway 68, Canton, NY 13617-1477, sfv1@cornell.edu, Phone: (315) 379-9192.

February 4 Schoharie County Beginner Maple School, Contact: JJ Schell, jjs69@cornell.edu, Cornell Cooperative Extension of Schoharie County, 173 South Grand Street, Cobleskill NY 12839,(518) 234-4303.

March 4 Twin Tier Maple Program For Beginners, Contact: Jim Ochterski, Cornell Cooperative Extension of Schuyler County, 208 Broadway, Montour Falls, NY 14865, (607) 535-7161.

March 18-19 Maple Weekend.

## Maple Syrup

#### **Equipment & Supplies**



- \* Come browse in our fully stocked showroom
- \* Leader-Grimm Distributor
- \* Evaporators in stock
- \* \*MRRCLAND 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: 315/852-3326

www.countrysidehardware.com

Hours: Mon. - Fri. 8:00 - 5:00 Sat. 8:00 to 4:00





#### 2005 North American Maple Syrup Council 46th Annual Meeting and Convention October 23-26, 2005 Trois-Rivieres, Quebec

The 46th Annual meeting of the North American Maple Syrup Council (NAMSC) was hosted by Citadelle, Maple Syrup Producers' Cooperative of Quebec and was held at the Delta Hotel in Trois-Rivieres, Quebec.

The four day conference began Sunday, October 23. Extension maple specialists, International Maple Syrup Institute (IMSI) directors, and NAMSC delegates and officers began the conference with planning sessions on Sunday.

Cecile Pichette, president of the organizing committee for Citadelle, Maple Syrup Producers Cooperative of Quebec, welcomed directors, delegates and participants to the conference.

Roger Sage, president NAMSC opened the meeting. Secretary, Joe Polak read the roll call of delegates. The delegates were asked to introduce their alternate and make a short presentation of the highlights of the past year.

Delegates and alternates present for the conference included: Ron Wenzel, del., Robert Duclos, alt., Maple Syrup Producers Assoc of Connecticut Inc; David Hamilton, del., Phil Hanner, alt., Indiana Maple Syrup Association; Jeremy Steeves, del., Alfred Buldoc, alt., Maine Maple Producers Association; Tom McCrumm, del., Massachusetts Maple Producers Association; Ron Thomas, del., Jean Maday, alt., Michigan Maple Syrup Association; Terry Stanley, del., Beth Collin., alt., Minnesota Maple Syrup Producers Assoc, Inc., David Briggs, del., New Brunswick Maple Association Inc; Hank Peterson, del., Bill Eva, alt., New Hampshire Maple Producers Association, Inc.; Avard Bentley, del., Maple Producers Assoc of Nova Scotia; Roger Sage, del., Warren Wells, alt., New York Maple Producers Association; Doug Fitch, del., Ohio Maple Producers Association; Bill Robinson, del., Vernon Wheeler, alt., Ontario Maple Syrup Producers Association; Barbara Kinnan, alt., Pennsylvania Maple Syrup Producers Council; Luc Lussier, del., Rene Ares, alt., Citadelle, Maple Syrup Producers' Cooperative of Quebec; Rick Marsh, del., Gerard Stevens, alt., Vermont Maple Sugar Makers Association; and Joe Polak, alt., Wisconsin Maple Syrup Producers Association. All member provinces and states were present.

Minutes of the 45th Annual Meeting held at Lake George, New York were presented and approved with one amendment.

**Motion:** Approve minutes of 45th Annual Meeting.

**Proposed by:** Ron Wenzel **Seconded by:** Bill Robinson

Action: Passed

The Treasurer's report of the general fund was present by Joe Polak. Current monies in the checking account are \$5595.44. One Certificate of deposit was opened in the amount of \$10,000.00. Total funds in CDs are \$62,239.46.

Motion: Approve treasurer's report pending audit committee report.

Proposed by: David Hamilton Seconded by: Ron Thomas

Action: Passed

Richard Norman, chairman Research Committee reported income of \$48,175.23 and disbursements for the past year of \$44,710.02.

Maple Research Proposals with recommendations for 2005 were presented

by Richard Norman.

Title	Amount Requested	Recommended Amount
Analysis of First Generation Super Sweet Maples Sugar Concentration Ohio State University, Extension, Ohio7,000	•	000.00
Improving Growth of Sugar Maple Cornell University, N.Y.	3,500.00	2,500.00
Improving Sap Quality through Sap Collection System Evaluation Using Glucose Testing Cornell University, N.Y.	2,400.00	2,000.00
Strategies to Limit Reductions in Maple Sap Yield In Vacuum Installations UVM Procter Maple Research Center, VT	7,000.00	1,500.00
A New Research Facility for Investigating the Effects of Sap Processing Equipment and Techniques on Maple Syrup chemistry and Q UVM Procter Maple research Center, VT	10,000.00 uality	4,000.00
Timing of Tapping under Vacuum  UVM Procter Maple Research Center, VT	7,750.00	2,500.00
Parasitoids of Native Beetles for Biological Control of the Asian Longhorned Beetle (ALB University of Vermont, VT	10,450.00	4,000.00
Natural Enemies for the Biological Control of Lecanium Scale: A Significant Threat to Sugar Maple Tree Health University of Vermont, VT	10,800.00	2,000.00
Effects of Three Sugarbush Management Techniques on Major forest Insect and Diseas University of Vermont, VT	9,675.00 se Pests	3,000.00

December 2005 21 Title Amount Recommended Requested Amount

Evaluation of Sap Filters 4,000.00(US) 3,500.00

Ontario Maple Syrup Producers Association. Ontario

International Grades and Quality 10,000.00(US) 3,500.00

Standards for Maple Syrup (Phase 1 and Phase 2) Ontario Ministry of Agriculture and Food, Ontario

International Grades and Quality 10,000.00(US) 0.00

Syrup (Phase 3)

Ontario Ministry of Agriculture and Food, Ontario

Motion: Accept Research Treasurer's report pending audit and recommend-

ed proposals.

**Proposed by:** David Hamilton **Seconded by:** Ron Wenzel

Action: Passed

Maple Digest editor, Roy Hutchinson presented a report for the fiscal year. Income for the Maple Digest for the past year is \$22,099.40 and expenses are \$22,642.25.

Motion: Accept Editor's report pending audit review.

Proposed by: Jeremy Steeves



#### 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

Happy Holidays and a Prosperous Sugaring Season

WE ACCEPT

VISA

Seconded by: Tom McCrumm

Action: Passed

Beth Collins of the bylaw review committee reported proposed revisions. She will receive further comments until December 1.

**Motion:** Separate the Secretary/Treasurer position into a Secretary position and a Treasurer position.

Proposed by: David Hamilton Seconded by: Tom McCrumm

Action: Passed

Randy Heiligmann reported all chapters for The New Maple Manual are written and edited. They have been sent back to the authors and producers. Layout will be done in January. Printing will be complete by April 15, 2006.

Russ Davenport reported on the Maple Museum and Maple Hall of Fame. Nelson Widrick and Lew Staats both of New York are deceased. The opening ceremony will be Saturday May 20, 2006.

Michael Girard reported on the Strategic Plan. Updates of the **Administrative** Goals include: 1. Improve operational efficiencies, 2. Provide safeguards (liability exposure), 3. Enhance membership opportunities and 4. Modify annual meeting format. **Communication and Education** updates include: 1. Improve internal and external communications, 2. Improve Maple Syrup Digest, 3. Update instructional manuals. **Financial** goals include: 1. Define duties of 3 divisions, and 2. Ensure financial stability. Finally, review **Funding of Research**: 1. Expand the research fund committee and 2. Increase contributions.

Liability insurance for NAMSC and volunteers was secured by Michael Girard. Joe Polak reported money in the general fund checking account was put into a CD in the amount of \$4000.00.

Roy Hutchinson talked about improving the Maple Digest and the high costs involved. Current membership dues, subscriptions and advertisements often do not cover costs. He welcomes initiatives of an advisory committee.

It was requested by Jacques Couture that online subscription for the Maple Digest should be considered.

A website has been developed by Tom McCrumm with the aid of Karl Zander. Currently the site consists of eleven pages. The address is www.northamericammaple.org. Tom McCrumm will set up list serve to help communication of committee members.

Russ Davenport is working on: 1. Guidelines for Hall of Fame nominees, 2. History of NAMSC and 3. History of the Maple Museum.

Financial planning was discussed by Joe Polak. Items to be considered include the dues structure for members and other possible revenue sources.

Richard Norman talked about the Research Fund. Suggestions include delegates being more involved in the review process, reexamine the .01 per container program, develop outreach program and rebuild communication.

Maple Specialist Patrizia Ramacieri of Center Acer suggested more coopera-

tion between research and maple specialists.

Aubrey Davis of New England Agricultural Statistics reported 2005 crop was down 18%.

A comment was made by Rick Marsh to clarify the wording regarding the beginning of season. Next year the questionnaire will ask for the first day of boiling.

Audit Committee reported all books are in good order.

The Nominating Committee, Luc Lussier, Bill Robinson, and Ron Wenzel, made the following nominations: Beth Collins, President; Tom McCrumm, Vice President; Joe Polak, Secretary/Treasurer. Update the 2005 Associate Members list to 2008. Remove Lew Staats from Life Member list.

Motion: Approve the recommendations of the nominating committee.

Proposed by: Luc Lussier Seconded by: Bill Robinson

Action: Passed

Newsletter Committee Chairman, Gary Graham, talked about the newsletter display and communication with the editors of newsletters of the states and provinces.

Delegates adjourned to executive session.

**Motion:** Restructure the Research Committee and the next President appoint new members with limited terms.



Proposed by: Rick Marsh Seconded by: Ron Wenzel

Action: Passed Motion: Adjourn

Proposed by: Ron Wenzel Seconded by: Alfred Buldoc

The contest winners are as follows:

#### MAPLE SYRUP

#### **Dark Amber**

3rd - Joe Polak, Wisconsin 2nd - Jacques and Pauline Couture, Vermont 1st - Melody Rooyakkers, Nova Scotia

#### **Medium Amber**

3rd - Pauline and Jacques Couture, Vermont 2nd - Michael Girard, Connecticut

1st - Joe Polak, Wisconsin

#### **Light Amber**

3rd - Martha and Russ Davenport, Massachusetts

2nd - Karen and Larry Hagh

1st - Michael Girard, Connecticut

#### **MAPLE CREAM**

3rd - Joan and Calin Reetz, Michigan

2nd - Jacques and Pauline Couture, Vermont

1st - Karen and Larry Hagh, Michigan

#### **MAPLE SYRUP GRANULES**

Pauline and Jacques Couture, Vermont

#### **MAPLE PHOTOS**

Category A - Michael Girard, Connecticut

Category B - Michael Girard, Connecticut

Category C - Russell Davenport, Massachusetts

Category D - Agnes Sojka, Ohio

The 2006 Annual meeting of the NAMSC will be held October 18-21 at the Regency Suites in Green Bay, Wisconsin.

Respectively Submitted, Joe Polak, Secretary, North American Maple Syrup Council

#### PRESSURE FILTER

#### From "Wes Fab"

#### Cost Effective Filter Press for the Medium Sized Producer

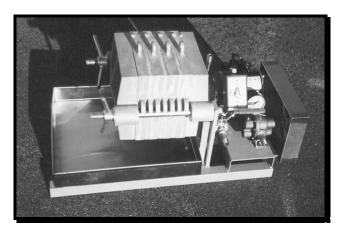
#### 10" Short Stack Filter Press with Electric Motor Driven Pump

Built for the Medium Sized Producer but designed to Expand. Uses standard 10" filter papers.

Comes with the standard 10" filter press electric motor, gear pump, drip pan, & stand, so you can add more plates & frames as your production grows.

Compact stand, lightweight aluminum plates & frames.

Same high quality as our larger models.



Contact Us for your Special Filtering Requirements or for the name of your local dealer



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

#### **WISCONSIN IN 2006**

The committee for the NAMSC/IMSI 2006 convention in Green Bay, Wisconsin is looking for anyone who would like to speak or give a presentation at the convention. Interested parties are asked to contact Joe Polak at:

Phone: (715) 536-7251 Fax: (715) 536-1295

E-mail: mplehollow@dwave.net or write to Joe at: Maple Hollow, W1887 Robinson Drive, Merrill, WI 54452-9543

#### THANK YOU

I would like to say Thank You, to the IMSI for the Lynn Reynolds International Maple Syrup Industry Leadership Award. It is a great honor to receive this award in that Lynn and I worked together for the industry for so many years.

Thank you again for this honor.

Richard Norman

## Happy Holidays

## SAP STEADY UV MAPLE SAP STERILIZER



## PROVEN RESULTS

#### STEADY PROFITS

Ultra violet sap treatment kills bacteria -Produce more Grade A product

- · Mounts on sugarhouse wall · Uses your pump
- Runs on115V current draws 15 AMP up to 30 GPM
- . 115V high intensity UV lamps
- 3/4" inlet/outlet turns on/off with your vacuum system

Contact us for details today!



#### The LOG HANDLER from OESCO, Inc.



- 900# Lift capacity
- 4000# Load capacity
- 350° Boom rotation
- 33 HP diesel
- Runs off tractor hydraulics
- Quick conversion from log handler to Transcar 3-way dump



Hardy 850ST Log Loader & Goldoni Transcar Utility Vehicle

OESCO, Inc. • P.O. Box 540 • Conway, MA 01341

800-634-5557 • 413-369-4335 • FAX 413-369-4431 • www.oescoinc.com • info@oescoinc.com

## Research Highlights 2005 PROCTOR MAPLE RESEARCH CENTER

#### FOOD SAFETY / SAP & SYRUP CHEMISTRY

Adulteration of Maple Syrup: Several agents are used to modify the maple characteristics of Sometimes these treatments are part of normal sugaring operations that are used incorrectly, and thus become contaminants, and sometimes illegal substances are used to purposefully make syrup lighter in color. This line of research seeks to develop rapid screening tests to detect contamination or adulterants in maple syrup. Perkins, van den Berg, Isselhardt, Wilmot, Baribault, USDA

Sources of Contamination in Maple Syrup: Lead can be a con-

taminant of maple syrup. Our goal is to reduce lead levels in syrup by identifying the sources of lead in maple equipment and altering production practices to reduce contamination of sap and syrup where it occurs. We are also interested in identifying natural levels of paraformaldehyde in maple sap (if any) and the influence of PF use on the level of formaldehyde in the finished product. *Perkins, Wilmot, van den Berg* USDA.

Characterizing "Metabolism" Off-Flavors in Maple Syrup: There is currently no identifiable cause for "metabolism", an off-flavor which occasionally develops in maple syrup, which reduces its marketability. Our research aims to identify the compounds in maple syrup that are responsible for metabolism off-flavors. Once identified, it may be possible to develop better strategies to



PRIVATE LABEL CANDY YOU CAN COUNT ON!

Crystal Coating For Extended Shelf Life

Our New Attractive Packaging Has A Space For Your Name and Address

Our Vermont maple kitchen produces Pure Maple confections of the finest quality according to strict standards. Years of knowledge and old-fashioned care go into the making of every piece. Grow your sales with these fine maple products from Bascom Family Farms.

Pure Maple Candy, Cream & Sugar • Maple Pecan Brittle

Maple Glazed Pecans... and more!

CANDY CANDY

PO Box 117 • Brattleboro, VT 05302

Phone: 888-266-6271 • Email: info@maplesource.com

FAMILY FARMS

cope with or reduce the occurrence of this problem. *Perkins, van den Berg, Isselhardt.* USDA.

#### PRODUCTION OF SAP AND SYRUP / MAPLE EQUIPMENT

Effects of Forest Fertilization in Sugarbushes: A new PMRC brochure "Fertilization of Sugarbushes" was published in October 2004. This brochure describes fertilization research conducted by PMRC staff between 1988 and 2003, as well as offering instructions and recommendations for sugarmakers who wish to fertilize their land. The brochure contains information about the potential geographical range of nutrient-deficient soils, tips on evaluating stand nutrition by recognizing key indicator plants, and considerations for sugarmakers who wish to certify their syrup as organic. Wilmot Perkins USDA, FREEMAN FDN, NAMSC.

Evaluation of Small Spouts: This study compares sap production and wounding using normal and small spouts. Under most conditions, sap yield was roughly the same for either size spout using vacuum, but was less for small spouts with gravity flow. In large trees under gravity or vacuum, wood discoloration from small taphole wounds was somewhat less than internal damage caused by large tapholes. Perkins, Wilmot, Stowe, van den Berg, Isselhardt CCMSMA, NAMSC.

Timing of Tapping and Length of Sap Season Using Small and Large Spouts: During the past decade, the northeast has experienced an unusual number of early spring thaws, with ideal sugaring



## 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

weather sometimes occurring before mid-February. Starting in 2000, groups of trees at the Proctor Center were tapped with small and large spouts at three different dates in the spring in order to determine which timina maximizes sugar vield. Results varied from year-to-year, depending on the weather and snowpack. Data over three seasons shows that under gravity, the longevity of tapholes drilled very early and fitted with small spouts is greater than that of 7/16" tapholes. Also, there were similar sap volume yields from trees tapped Feb. 1 and Mar. 1 in most vears. Wilmot UVM AES.

Vented versus Closed 5/16"
Tubing: It is widely recommended that tubing systems be closed rather than open or vented. It is common to

see 5/16" lines full of sap that appears to be stagnant. It is true that when the end spout is pulled on a socalled stagnant line the sap will drain out rapidly leading producers to believe that lines need to be vented to allow them to drain properly. After close observation, vented lines move a little sap and a great deal of air very rapidly while closed lines move at a reduced rate yet produce much more sap due to the fact that they are moving sap and not air. The stagnation effect is an illusion. While sap runs faster through vented compared to non-vented tubing systems, venting of tubing resulted in a 32% loss of sap production, probably due to faster drying of tapholes and loss of natural vacuum on slopes. Stowe Isselhardt NAMSC.

#### Syrup Bottles and Jugs



#### 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

Optimum Number of Spouts per 5/16" Line under Vacuum: We compared sap production from tubing setups with 1, 5, 10, and 15 spouts per 5/16" line. Single tap setups produced the most sap, with lesser amounts from the 10 tap (20% reduction) and 15 tap (28% reduction) lines. It is felt that the distance of the 5/16" line plays a large roll in the efficiency of a tubing installation. The theory being that shorter lines transmit vacuum more effectively and in general produce more sap. Stowe, Isselhardt, van den Berg NAMSC.

New Versus Used Tubing Under Vacuum: Occasionally sugarmakers will recycle used tubing or delay replacement of tubing in their sugarbush. We compared sap production from new and used washed 5/16" tub-

ing. New tubing produced, over two seasons, an average of 10-30% more sap than used washed tubing. *Stowe, Isselhardt, van den Berg* NAMSC.

A Three Year Comparison of Tubing and Installation Methods in a Field Environment: This study compares the materials and methods of vacuum tubing installations of three equipment manufacturers. The participants were assigned approximately 200 taps within the sugarbush at The Proctor Center and asked to install a tubing system. Sap production, quality, longevity, maintainability, and costs are being recorded with the goal of deciding which is the most efficient and cost effective. The study is currently in its second year. Perkins, Stowe, Isselhardt NAMSC, CCMSMA.



#### MAPLE PHYSIOLOGY & GENETICS

Meteorological Influences on Stem Pressure and Sap Flow in Sugar Maple: Cold nights and warm days will always provide the conditions necessary for good sap runs, but changes in global climate could affect the timing and success of sugaring in the Northeast. Using electronic sensors, we can measure air. wood and soil temperatures, as well as stem pressures and sap flow in sugar maple. Real time data are shown our web site each spring. Our collection of data contributes to our long term goal of constructing computer models relating sap flow to meteorological conditions. Wilmot, Perkins HATCH.

Relationship Between Tapholes on Opposite Sides of a Tree: What Area of a Tree Contributes Sap to a Taphole? Using electronic sensors which can measure pressure in different parts of the trunk, we experimented with trees of various sizes to determine the timing and extent of sap movement toward an open taphole. Results have shown that the general behavior of sap movement is similar under both gravity and vacuum, but vacuum draws sap from a larger area of the wood, and affects areas of the trunk more rapidly than gravity. Results also suggest that there is considerable sap movement in a horizontal direction, and therefore tapholes on opposite sides of the tree may be drawing from the same area of wood, depending on the duration the sap flow event. Wilmot HATCH.

Molecular Genetics of Sweetness: Mature, field grown trees and younger, plantation grown half sib families from both higher and lower yielding mother trees have been monitored extensively for their sap characteristics. The polymerase chain reaction techniques are being used to create a database of DNA fingerprints. Differences in fragment patterns are the focus of current experiments. Such DNA markers will later become the basis for identifying higher vielding trees at the seedling or sapling stage, thus saving time and energy in the production of improved stocks of sugar maple. Baribault, Currier USDA.

Portable Chlorophyll Meters as an Indicator of Maple Health and Nutrient Status: Portable chlorophyll meters accurately estimate chlorophyll and nitrogen content in agricultural and some forest species and thus can provide an assessment of relative health status. This research evaluates the ability of chlorophyll meters to estimate these parameters in sugar maple. The relationship between chlorophyll fluorescence and the physiological health of sugar maple will also be investigated. van den Berg, Perkins EPA.

Fall Coloration in Sugar Maple: While important economically and scientifically, the process of fall coloration in sugar maple has not been widely studied. Our current research aims to improve the basic understanding of the process and identify factors that may be valuable in predicting the timing and quality of fall coloration. Specifically, anthocyanin pigments and their function and rela-

tion to physiological processes during fall senescence will be examined. van den Berg.

#### FOREST ECOLOGY & HEALTH

Effects of Ice Storm Damage on Carbohydrate Reserves, Growth, and Survival in Sugar Maple: The Ice Storm of 1998 caused extensive damage to sugarbushes in New England, New York, and Canada. The loss of crowns resulted in depleted carbohydrate reserves in heavily damaged trees for two-three years after damage. The amount of carbohydrates stored in wood and root tissue was related to the amount of crown loss. This research is aimed at improving knowledge of how crown loss affects tree carbon reserves, sap production, growth, and survival in ice-storm-affected areas. Perkins. Wilmot, van den Berg VTFRP.

Effects of Global Change on the Maple Sugaring Industry: This research is examining the potential effects of global warming on sap production in the northeast. A survey of





65 Charlie Wood Road Delancey, N.Y. 13752 Phone: (607) 746-6215 Fax: (607) 746-8367

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'  $\times$  12' Leader wood-fired evaporator SS syrup pan, tin flue pan, home made hood and pre-heater \$1650
- 3 I/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

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

Check Out Our Website for Updates
NEW YORK STATE LICENSED SYRUP BUYER BARRELS AVAILABLE

sugarmakers will be conducted to find long-term records of production that might show evidence of global change. In addition, computer modeling will be employed to predict the effect of warmer spring seasons on maple flow. *Perkins, Wilmot, Hoffmann* USDA HATCH, NAMSC, DOE EPSCOR.

Fern Effects on Sugar Maple Regeneration: Sugarmakers have long recognized that areas dense with hay-scented fern are often associated with poor regeneration of sugar maple. We compared sugar maple seedling survival of unmanipulated plots with plots that had ferns removed. Seedling survival is strongly correlated to fern density. Plots with high fern density had very low sugar maple seedling survival (and very low light levels), whereas plots with ferns removed had higher seedling survival (and higher light levels). removal may improve seedling densities in areas where regeneration is poor. Hane NAMSC.

Acid Rain Effects on Forested Ecosystems: Forest decline was a major concern throughout the 1980's and in the early 1990's. While the Clean Air Act of 1990 addressed some aspects of pollution, acid rain does continue to fall. Long-term vegetation plots on Camels Hump Mtn. are measured periodically to assess the current state of forest health and growth. Perkins, van den Berg EPA

**NAMSC** = North American Maple Syrup Council **EPA** = US Environmental Protection Agency USDA = US
Department of Agriculture CCMSMA =
Chittenden Co. Maple Sugar Makers
Association HATCH = USDA Hatch UVM
AES = University of Vemront Agricultural
Experiment Station, VTFPR = Vermont
Department of Forests, Parks &
Recreation

#### **UVM PMRC Scientists & Staff**

Timothy Perkins, Ph.D. - Director; Brian Stowe, B.S.F. - Sugaring Operations Manager; Abby van den Berg, M.S. - Maple Research Technician; Mark Isselhardt, B.S.F. - Sugaring Operations & Research Technician

#### **Affiliated Staff**

Tom Baribault, Ph.D. - Research Scientist; William Currier, Ph.D. - Cooperating Scientist, UVM Biochemistry; Elizabeth Hane, Ph.D. - Rochester Institute of Technology, NY; Miriam Pendleton, B.A. - UVM Vermont Monitoring Cooperative

#### **UVM Maple Extension Specialists**

Timothy Wilmot, M.S. - PMRC, Underhill Ctr.; George Cook - Morrisville

#### Questions?

**Send mail to:** Proctor Maple Research Center, P.O. Box 233, Underhill Ctr. VT 05490

Phone: (802)899-9926 Fax: (802)899-5007

email: pmrc@zoo.uvm.edu, http://www.uvm.edu/~pmrc

#### **COMING EVENTS**

#### NEW YORK STATE MAPLE PRODUCERS CONFERENCE

January 6 and 7, 2006

Vernon-Verona-Sherrill Central School, Verona, NY

#### For more information contact:

Keith Schiebel at (315) 829-2520 ext. 262 e-mail: kschiebel@vvs-csd-high.moric.org.

#### NORTHERN NY MAPLE EXPO AND CONFERENCE

Saturday, January 28, 2006 Potsdam High School, Potsdam, NY

#### For more information contact:

David Sipher, FAA Advisor 315-265-2000, ext. 840 sipherde@potsdam.k12.ny.us www.potsdam.k12.ny.us/hs/sipher

#### 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: ccyr1@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, 2006 Sturbridge, Massachusteet

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:

mplehollow@dwave.net

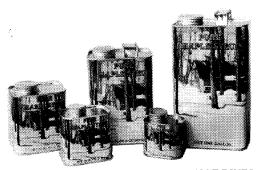
#### **New England Container Company**

#### 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** 



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

#### **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:** 2' x 8' Small Bros. evaporator with pre-heating hood and forced air draft - EC, \$2,850 firm. 300 gallon stainless steel tank, \$425. 43 pails with covers, \$6.75 each. (518) 762-8356.

**FOR SALE:** Cord Wood Saw power take off drive with 3 point hitch, \$200 or best offer (413-634-2194).

**COMPLETE MAPLE SUGARING OPERATION FOR LEASE:** Sugarhouse, 6' x 16' Leader dual oil fired evaporator, stainless welded pans, rear drop flue 6' x 10', front 6 x 6 cross flow, 6' x 10' Steamaway (arch and pans used for 2 seasons). 10,000 gallon heating oil storage tank, 60 gallon stainless propane finishing pan, 10" filter press, (6) 40 gallon stainless storage barrels, (25) 30 gallon epoxy lined storage barrels. Small Brothers electric hot water jacketed canning unit (4 nozzle), 6000 gallon vacuum storage tank, Travaini liquid cooled electric vacuum pump, 3,000 taps on line, could be expanded to 7,500+, 2" main line, 1 1/2", 1 1/4" and 1" branch lines, IPL rigid 5/16" used 1 season. All lines have been pressured cleaned. Complete production records for last 30 years available. Please call (603) 523-4838 for details.



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



\*Bacon Jugs



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

#### 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

#### IN MEMORIUM

#### LEWIS J. STAATS — 1942 TO 2005

Lew Staats, a significant contributor to improvements in the maple industry, passed away peacefully following a short illness. Born in New Jersey, he fell in love with the Adirondacks while attending Paul Smiths College and made a life for himself and his family in Lake Placid, NY. He was hired by Bob Morrow to run the new maple facility at Lake Placid, supported financially and through avid interest of Henry Uihlein. Lew literally built the place, drawing on his background in construction. Sometimes with helpers and sometimes alone, Lew turned the forest into a productive sugarbush for research and extension. After Bob Morrow retired, Lew became "Mr. Maple" for New York as well as for many producers throughout the maple region. He obtained a Bachelor of Science degree in forest management from SUNY Empire State College in 1986 followed by a Master's degree in forest resource management from SUNY College of Environmental Science and Forestry in Syracuse in 1992.

A modest person, Lew was most at ease in the woods and with nature. He was knowledgeable and observant about the natural world. Working for the maple industry was much more than a job for Lew. He devoted much time and his own money to multiple research projects and to sharing the latest results with producers. Lew made important contributions to developing tubing and vacuum systems, to making improved genetic lines of sugar maple available to producers, and to addressing insect outbreaks, ice storms, and similar emergencies that develop in the maple world. He had a reputation for sticking close to what was known through research. He knew all the maple lore, but he understood that his value to the industry came from testing and challenging conventional wisdom. As a researcher, he was meticulous in his note-keeping and he willingly opened his extensive files to those wanting to learn more about maple tools and techniques. His willingness to help others with sound, provable information made him a sought-after mentor. Lew created the satellite maple school and a set of instructional videos as novel ways of communicating across the maple producing states and provinces.

Lew obtained many professional awards for his work with maple production, including the Charles R. Hubbell Memorial Award in 1993 "for service to the New York maple industry." He was inducted into the American Maple Museum Hall of Fame in 1997.

Lew needed to be active. Following his 2001 retirement at Cornell, he started a new job as a teacher at Paul Smiths College. He also paid more attention to developing his backyard sugarbush with smaller research projects. Retirement afforded more time for fishing and hunting and his family, though a new fishing boat purchased a week before his cancer diagnosis never made it to the water.

Maple producers everywhere benefited from the time Lew Staats spent with us.

#### 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 subscri	be 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!

FOR
NEXT ISSUE
JANUARY 2,
2006

IF YOUR

MAILING LABEL

**READS** 

**SD05** 

Subscription ends December 05

THIS IS

YOUR LAST PAID ISSUE

Please renew your subscription

