November - December 2015 Volume 17 No. 5



A Newsletter for Members of the St. Lawrence Power & Equipment Museum, a 501(c)(3) Education Corporation

## **Endowment Match Needs Support**

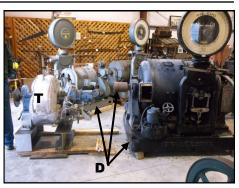
uring June of 2013 the **Northern New York Community Foundation** announced the award of a \$12,500 matching grant to the Museum. The Museum was given three years to raise the matching amount. Our time runs out in 2016. To date, members and friends have donated a little over \$3,000. Just under \$9,500 remains to be raised to meet the challenge. We hope that among our nearly 1,000 members will be those who can afford a gift of \$50 to \$500 to help reach this goal. This will result in a total of 2 X \$12,500 = \$25,000. Add to that the \$5,000 that had been donated prior to the Foundation's challenge, and the Endowment Fund will have reached \$30,000 - a great start on guaranteeing the Museum's future. The Endowment Fund is a key element in assuring the long-term sustainability of the Museum. As it grows it will provide a regular source of income. The Fund's principal will always remain and grow through the efforts of dedicated investment professionals at the **Foundation**. Gifts for the Endowment Fund match can be sent to: Treasurer, SLPEM, PO Box 400, Madrid, NY 3660. Thanks!

## Clarkson Donates Turbine and Dynamometers

enovation of *Old Main* at **Clarkson University** required removal of long-idled equipment from a steam power lab probably dating back to the 1950s. A Terry steam turbine and three GE dynamometers were donated to the Museum. The University is keeping its classic Corliss-design piston steam engine. During November and December, Museum Trustee Gary Hargrave worked closely with Professor James Bonner and Research Assistant Professor Chris Fuller of the University's Dept. of Civil & Environmental Engineering. The equipment was moved by Paul Moore of **Moore's Excavating Co.** of West Potsdam with his lifting equipment and trailer and with Jim McGraw and his trailer. These remarkable machines will join gas and steam engines at the Museum in an exciting Power Exhibit. The search now begins to find volunteers familiar with the equipment and others who can help prepare interpretive exhibits (see page 2). Contact Gary (see last page) if you wish to help.

# **Covered Bridge Donated to Museum**

small Covered Bridge arrived at the Museum in mid-December. However, within days a gale-force wind storm tipped over the bridge and flattened it. The good news is that Don Lustyik reports that it will be reassembled during the coming year. The bridge was formerly located in Norwood adjacent to Baldwin Acres apartments where it spanned a small stream. The original builder, Paul Truesdale, and Rod Cota organized its donation. Truesdale built the bridge following the principles of Ithile Town who first patented his lattice bridge design in 1820. Faithful supporters of the Museum helped with its relocation. Brian Haggett of **Haggett Excavating** in Norwood lifted the bridge and transported it to the Museum where it was off-loaded by Wayne Taillon of **Wayne's Gas & Service** in Madrid. Though built in 1991, the bridge evokes thoughts of earlier times and will find new purpose at the Museum.



Three General Electric DC dynamometers (**D**) with Toledo scales and a Terry Steam Turbine (**T**) after arriving at the Museum.



The Terry steam turbine covered with an insulating shroud was bolted up to a GE dynamometer so students could measure power output at varying speeds.



The Covered Bridge from Norwood soon after it arrived at the Museum.

Museum Fvents 2016 Jan. 30 Feb. 7 May 14 & 28 June 11-12

Saturday, 9:00 AM, Annual Meeting of the Board of Trustees. Tractor shop if snow permits? Sunday, 1:30 PM, Annual Meeting of the Members. Madrid Community Center. Saturdays, Open House (Work Day the 28th). Help us sweep the floors and dust the exhibits.

34th Annual Antique Gas & Steam Exhibition. Start planning now.

July Annual Banquet in the Pavilion Building .

Sept. 3-4 26th Annual Old Fashioned Harvest Days Exhibition.

# **Dynamometers, Tractors, and Engines**

any owners of antique farm tractors welcome the opportunity to belt up power. The proliferation of tractors in the early 1900s found many that did not live up to the claims of the manufacturers. In 1919, the Nebraska legislature passed a law that no tractors could be sold in that state unless they had been tested by an independent lab. The state opened a test lab in 1920 which set the standard for future measurements. It still operates today. Back in 1821, Gaspard deProny had already invented a machine, the Prony Brake, for this purpose. It could be used to determine the power of any engine ranging from waterwheels to steam engines. A Baker Fan is often used at antique tractor events to measure horsepower. It was invented by A.D. Baker and the Baker Steam Engine Company, originally to provide a load for running in new engines. People use the relatively simple device to determine horsepower using sets of charts relating horsepower to rpm's. However, this is not as accurate as other devices, especially in higher horsepower ranges. The GE dynamometers from Clarkson University involve electric power loads and have the potential for use as a means of testing tractors. However, electrical control panels are needed. Gear boxes will also be required to bring the rpm of the engines up to the range for which the dynamometers were designed. The Terry steam turbine from Clarkson (page 1) has a gear box matched to its dynamometer. The Clarkson dynamometers have great potential for practical use in knowledgeable hands.

# **Visitors Enjoy Tractor Pulls and Exhibits**

ntique farm tractors continue to be a favorite of Museum members and visitors alike. They can no longer match the extraordinary power and sophistication of the modern machines. However, their relative simplicity and functional design make them fun to operate, maintain, and even restore. Many are still in daily use, even after a half century or more. The new Antique Tractor Building now provides space for display, storage and restoration of Museum tractors and those of Members. Though still needing funds to complete the installation of two more internal overhead doors, the facility can be used most of the year. Meanwhile, the popularity of tractor pulls - antique farm tractors and garden tractors alike - has made improvement of the pull track an important objective for 2016. Its new location will provide greater working space and safety for competitors and spectators alike.

The River Valley Antique Tractor and Engine Club has provided the all-important sled and scales for the tractor pulls as well as most of the management and officiating. The Club also provides added insurance protection for the day-long events. These are held on Sundays at both annual exhibitions. There are as many as 16 weight and power classes which usually attract over 100 entries. The weight of the sled pulled by the tractors is scaled to each class. You will see Farmall, McCormick Deering, Allis Chalmers, John Deere, Case, Minneapolis Moline, and Ford among other brands represented at the pulls.

The names of drivers and mechanics involved are well known among the fans including Winston Armstrong, Wayne Baldwin, Lloyd Barringer, Terry Bellinger, Blake Bertrand, Aaron Bice, Clifford Bice, Colleen Bice, Frank Bice, Austin Cameron, Josh Carter, Chuck Chapman, Red Chapman, Gene Collier, Dan Davis, Micke Dreve, Aaron Durant, Louie Durant, Jason Engle, Al Garrand, Dean Hoffman, Rocky Jacobs, Robert Johnson, Bill Kenny, Neil Kenny, Brent Kuenzler, Lee Latulipe, Gary Livingston, Mike Livingston, George Lester, Bill Martin, Doug Mathie, Jim McGraw, Gary Monica, Jeff Monica, Jerry O'Connor, Mike Preve, Kevin Rowen, Bill Rupp, Dale Sherwin, Steve Smith, Dick Sprague, Abby Stout, Dave Stout, Kristen Thompson, Corey Todd, Coleman Whitman, Kevin Wilcox, and Joe Wood, not to forget Tammy Abrid who manages and keeps all the records.

The Heavy Haulers and others from Franklin County first brought their garden tractors and pull competition to the June Exhibition in 2014. They have continued to bring their pull sled and provide management for the events. Mike Foley, Darren Jock, and Heidi Crump have provided important leadership for the competitions. Pullers from other areas have now joined in. Look for more information on the Garden Tractor Pulls in future Newsletters.



A Prony Brake at the Southland Flywheelers at their park in Hartselle, AL. Note the large brake to create load and the beam scale to measure pounds.



A Baker Fan at the Western Minnesota Steam Thresherman's Reunion in Rolla, MN. The fan produces the load. Horsepower is determined by the dimensions of the fan and RPMs but is sensitive to air density (temperature, barometric pressure, humidity, and elevation).



Wayne Stark on his restored Farmall Super C. Lordy, we do love our tractors.

#### We Remember:

Everett E. Prouty passed away November 25, 2015. He had operated the family dairy and was fond of antique tractors and automobiles. He and his wife, Anne, have been generous contributors to the Museum. He was 84 and is survived by Anne.

### Please Mail in Your Proxies and Ballots!

lacksquare oting members of the Museum (look for a f V after your name on the mailing label) should find election information enclosed in this Newsletter. This includes biographic sketches of the candidates, ballots, and proxy forms. The nomination period has been concluded with candidates identified for the 2016 election of officers and trustees to the Board of Trustees. Ballots must be received by Barbara Fisher, Nominations and Elections Chair, or at the Post Office in Madrid by Saturday morning, February 6, 2016, the day before the Annual Meeting of the Members. If you do not plan to attend the Meeting (1:30 Feb. 7), please send in your proxy along with your ballot. To have a quorum at the meeting, the sum of voting members present or represented by proxy must equal 10% of the qualified voting members. Qualified voters are those whose dues are current. If you do not see a 16 (or later) following the V on your mailing label you may enclose a check with your ballot to bring your dues up to date. Dues are still \$15 for an individual or \$20 for a couple. Please direct any dues questions to the Treasurer (see back page). There are lots of exciting things happening in the coming year. See you at the Meeting!

### **Horse-Pulls Continue Growth**

The horse-pull competitions held during the spring and fall Exhibitions continue to grow each year. These exciting events feature teams of well trained draft horses and miniature horses. The former are usually grouped in light and heavy classes. The latter are separated as to their height at the withers (base of the neck), either 34 or 36 inches. The miniatures are true horses and not to be confused with ponies. Competitions at the Museum are held on Saturday during the Annual Exhibitions. The horses pull stone boats or sleds carrying stones (or concrete) of about 370 lbs. each. The miniature horses are accommodated by a mix of these with smaller 100 lb. stones. Draft horses must pull their load at least 15 feet and the miniature horses 10 feet. The number of competitors is still not as large as desired, so the two classes in each are combined. The winner at the recent draft horse competition pulled 8,500 lbs. while the winner among the miniatures pulled 2,600 lbs.

At the Draft Horse Pulls you will see the teams of Ben Damuth, Derick Damuth, Phil Damuth, Bud Dufresne, Tim Hatch, O'Henry Lovejoy, the Francis McNeil family, Gary Roberts, and Bill Thomas. Miniature Horse Pulls feature teams of Joe Burdo, James Manor, Butch Miner, Jim Moore, Gilbert Rabideau, and Eric Trombley. Some bring as many as three teams!

When built, the Equine Pavilion will accommodate the horse pulls with plenty of room for spectators, permitting competition in any weather. The facility will also provide space for shows and student programs, as well as auctions and winter storage. The building will cost \$112,000. A grant from the Community Development and Environmental Improvement Program for \$65,000 has been received. Just over \$20,000 remains to be raised to cover all expenses. Donations are welcomed. If you have any questions just call John Castle at (315) 322-5663 or email andreacastle22@gmail.com.



The Museum's exhibit at Lisbon's "Lights on the River" featured a Harden sleigh filled with gifts and toys.



The miniature horses show that they can get the job done at the 2015 June Show.



This draft horse team is making its first pull with a relatively small load.

## Thank You Horse Pull Sponsors!

MacFadden-Dier Leonard Agency, Inc., Insurance
Duane Villnave, Villnave Transportation Services, Inc.
Wight & Patterson, Inc. Animal Feeds & Supplements
Robert and Barbara Evans, Evans Farm Repair
H.A. Rogers Agency, Inc., Insurance
Roddy Burns, Burns Construction Co.

Photos courtesy of Roger Austin, John Bartholomew, Mary Jean Chester, Shirley Dickinson, Chuck Goolden, Gary Hargrave, and Bob Jones.



A garden tractor ready to pull at the June Exhibition in 2015.

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### Museum Trustees

President/Trustee: Reginald F. Chester, 8350 County Route 27, Lisbon, NY 13656. Phone (315) 394-6513. Email: rmjchester@slic.com.

Vice-President/Trustee: Kevin Finnegan, 3357 County Rt. 14, Madrid, NY 13660. Phone (315) 322-5771. Email: maplemeadowsfinnegan@gmail.com. Secretary/Trustee: Roger S. Austin, 410 Stevenson Road, Rensselaer Falls, NY 13680. Phone (315) 344-7470. Winters: 179 Lakecrest Dr. NE, Milledgeville, GA 31061. Phone (478) 453-3640. Email: rsaustin123@earthlink.net.

**Treasurer/Trustee**: Lee W. Dezell, 1648 County Route 31, Lisbon, NY 13658. Phone (315) 393-6328. Email: leedezell@gmail.com.

**Trustee:** Terry Billings, 731 State Highway 310, Canton, NY 13617. Phone (315) 386-4154.

**Trustee**: Joseph A. Finnegan, PO Box 101, Madrid, NY 13660. Phone (315) 322-4017. Email: jfinnega@twcny.rr.com.

Trustee: Alan L. Garrand, 299 County Route 20, Richville, NY 13681. Phone (315) 287-7225. Email nagarrand@twcny.rr.com.

Trustee: Gary F. Hargrave, 10 River Street, Norwood, NY 13668. Phone

(315) 353-2888. Email: ghargrav@twcny.rr.com.

Trustee: Arthur Knauf, Jr., 522 Horseshoe Road, Heuvelton, NY 13654.

Phone (315) 344-6373. Email: knauf.arthur@gcsk12.org.

Trustee: Connie Martin, 501 County Route 36, Chase Mills, NY 13621.

**Trustee**: Connie Martin, 501 County Route 36, Chase Mills, NY 13621 Phone: (315) 769-8883. Email: cjmartin54@email.com.

**Trustee:** Eric J. Warner, 9396 Five Mile Line Road, Ogdensburg, NY 13669. Phone (315) 393-7931. Email everpleasantacres@yahoo.com.

Recording Secretary: Barbara F. Fisher, 104 County Route 31, Madrid, NY 13660. Phone (315) 322-0501. Email bfisher001@tweny.rr.com.

www.slpowermuseum.com
E-mail info@slpowermuseum.com
Webmaster: Gary Hargrave at ghargrav@twcny.rr.com



The Three Amigos at the 2015 June Show, among the several draft horses that entertained members and visitors alike.

Help us help you by keeping our contact information up to date. Undelivered Newsletters are returned to us at 1st Class rates. If you have a seasonal address, please let us know it and the dates they go into affect. Thanks!