# QUINEBAUG VALLEY ENGINEERS



Museum

The Zagray Quarterly

September 13, 2012

# **PRESIDENT'S NOTES**

Lots going on at the farm these days. I think I could fill this whole section of the newsletter just talking about donations. The Twin City engine that originally powered the Lane saw mill was patched together to run the Amidon portable mill. It did run but still has issues like antifreeze leaks inside and out. So, member George Jarvis who runs the 80D shovel, donated a Detroit diesel engine to run the Amidon mill. Seems to be working much better.

Also an antique folding saw dating back to the 1800's was donated to enhance our collection. It would take too long to describe how it works so I suggest coming to our next show Oct 6 & 7 to see it set up. It was featured in a Farm Collector magazine at: <u>http://www.farmcollector.com/equipment/folding-saw-zm0z12junzbea.aspx</u>

Our latest find is an Atlas Imperial 4 cyl diesel engine that dates back to the early 1900's. This engine upgraded a previously water-powered button factory located in Willington, CT. The advent of cheap plastic buttons put the factory out of business soon after World War II ended and the engine and factory still sit there today like it was on the last day of work. The engine weighs about 7 tons so it's going to be a challenge to move. They installed the engine back when they had less machinery to work with than we do now so I'm sure we can get the job done.

We finally received the building permit to reconstruct the building that is called the drying shed. As you may recall the roof of the building partially collapsed from the snows of winter 2010-11. The sandy floor made it very difficult to move anything heavy in and out and being open on two ends barely kept the weather out. Work is progressing nicely and this will a great improvement to the farm.

At the June QVEA monthly meeting I announced that I would not seek a seventh term as President. The term ends at the October meeting of this year. Club member George Lehr has stepped up and volunteered to run for this position. Seeing that he is the only one running for the office of president, I would assume he will be the next president of QVEA. I'm sure he will do a great job. He has the most important quality needed and that is a strong interest in the farm and club. I will do whatever I can to assist him in a smooth transition. I will continue to be actively involved and be a strong supporter of the club.

Hope to see you at the show and around the farm.

## FROM THE DESK OF THE TREASURER – Art Chester

There has been so much going on at the farm in the beginning of September I hardly have found time to write anything for the newsletter. More on that later. The Quickbooks conversion has easily cut in half the bookkeeping tasks associated with the office of treasurer and that's great, considering all the other tasks on my plate.

Our July show had good weather and the results showed it. The summer show is generally our smallest show, yet it turned in monies rivaling the spring show. It will be interesting to see what October brings. We will need to spend approximately \$10,000 on the rebuild of the drying shed, mostly laminated beams, plywood and roofing material. Any donations toward this building will be immediately put to good use.

If you have an email address, please email Dianne Tewksbury at <u>dtewks@sbcglobal.net</u> to change from snail mail! That will save our printing-sorting-folding-mailing crew some labor, and save your club a *lot* of money, as well as being environmentally 'green'.

For those of you who contribute to the United Way campaign, QVEA is now listed as a charitable organization allowing you to direct your donation to us for the support and expansion of the Zagray Farm Museum. Pfizer Foundation also has a volunteer program that provides QVEA with substantial donations each year, based on the volunteer work of members who work or are retired from Pfizer. We appreciate all donations in any form or size.

### Happening at the Farm

#### **Drying Shed**

Immediately after receiving the permit from the Town of Hebron, a crew spent a weekend removing all of the stored equipment from the Drying shed, another weekend dismantling the building except for the poles, and another weekend removing the soft sand inside the building and replacing it with good gravel. After some bulldozer work, loader and roller work, we now have a good base to work off of. Show season is in full swing and will delay the actual start of construction till just after our October show. Anyone willing to help with this project can contact the project co-coordinator, Dave Chester at 860-982-5163. This will be a fast paced project as we intend to have it closed up for winter. With that in mind, any time or expertise anyone can lend to the project will be welcome.

#### **Atlas Imperial Diesel engine**

A group of us went to look at this engine which has been offered for donation, currently in an old button factory in Willington. It is a 4 cylinder model probably from the early 1920's and has not run in 50 years or more. However, the engine and support equipment has not been touched since the last time it was shut down, and has been inside its entire life. Those two factors make it an incredible 'barn find' not to mention the scarcity of this type of engine. Some quick research reveals that most of these engines were for marine duty in tug boats and pleasure yachts on the west coast. Very few found their way to this side of the continent. More information and pictures can be found on Smokstak at this url:

#### http://www.smokstak.com/forum/showthread.php?t=109497

Arrangements are underway to get a crane and trailer lined up for a move before winter. It should take a crew a couple of weekends to make the engine ready to move as it is much smaller than the Fairbanks we acquired from Bristol.

#### **Portable Sawmill**

The Minneapolis Moline engine, formerly on the Lane sawmill when Harry Zagray was alive, was intended to power the portable mill. It has developed an antifreeze leak internally in the engine, and that coupled with its lack of horsepower has sidelined this engine momentarily. In its place, George Jarvis has donated a 353 Detroit like what was on this mill when we got it, and using parts off the blown up 353 we now have a nice running power plant. Quieter as well, if one could ever say a Detroit was quiet!

The 1953 GMC Dump truck at my shop is still waiting for its push rods, and now that the Clark is out, we'll get to it next. Finishing that up won't take much, as the head is already on. We were waiting on the correct push rods for the engine, and those were a little difficult to locate. We have them now, so nothing else would appear to be in the way of completion. I can't move it when complete, so we'll need to find someone to help us out there. Let me know if you can help.

## Zagray Saw Mill

We ran the mill at the July show, of course, and intend to cut some of the few remaining 2 X 4 material needed for the Drying Shed. We have cut all of the material for this building with the exception of the laminated beams and plywood of course. The large piles of lumber will start to disappear once we begin work on the shed. Once we see what is left, we can begin cutting material for the replacement of the shed next to the machine shop, a 2013 project.

Our softwood log pile is quite robust, but we are very short on hardwoods, so keep an eye out for them. We have enough pine and spruce to provide siding and 2X stock for the drying shed, and then some. Most has been cut at this point, stacked and covered.

Remember that the material cut at the mill may be specific to a particular job or member. So if you need something, check with Dave @860-982-5158 or Ned @860-537-2252 so you don't inadvertently use lumber slated for another project.

If you have trees taken down, please keep the sawmill in mind and cut the logs into lengths preferably 8'6",10'6", 12'6", 14'6" or 16'6", depending on what will yield the best timber. We can arrange to pick them up if necessary. Most all species can be used, but hardwoods in particular are in the shortest supply. Longer nice pine or spruce logs welcome as well.

If you need something specific cut - see one of us to discuss it.

We have slab wood that needs to be put to use as firewood, as well as sawdust and planer shavings (makes great fire starter!) as byproducts of this demonstration area available. See any of us if you want some.

## Fordson Accessory Guide, Volume 1

It's not often that anyone you know becomes a published author, but our Vice President, Ed Bezanson has completed the first volume of his Fordson Accessory Guide. Now, I'm not a Fordson buff, but the sales literature collection in this volume makes for very interesting reading, regardless of the 'color' of your favorite tractor! A must have for winter reading!

While I'm talking about books, there is a new one out about the Coolspring Power Museum in PA. If you have not been to the museum, you need to go. Don't think about it, go! I have not yet seen a copy of the book, but it ought to be another 'must have' for all of us who have enjoyed a show at Coolspring, Pa. copies can be ordered from Farm Collector Magazine

# **NEW MACHINE SHOP PROJECT - By Dave McClary Aug 2012**

One of the first donations made to QVEA after the Club was started in 1993 was an as yet unidentified small planer that now stands patiently in the small room of the machine shop hoping to be put to use. Previous inspection showed that it appeared to be from the late 1800's, it was complete and the parts moved, there being no rust evident. Further inspection has revealed how the drive system works. There are three pulleys on the left side of the planer, the center one an idler, the right one for cutting and the left one for returning. A gear train from these pulleys drives a bull gear that engages a rack on the underside of the platen, or table. The return stroke is twice as fast as the cutting stroke, common planer practice. With an operating line shaft in the small room now running two machines, the next obvious addition to the system is the small planer. Also, nearby on the display bench is a No. 3 Burke milling machine that could easily be run off a new countershaft along with the planer. That miller was found in the lower level of the barn and restored several years ago. This would result in having the four basic machine tools operable for demonstration purposes, a lathe, planer, shaper and miller. What does it take to make this happen? Quite a few things need to be resolved. First is to make space by moving two large countershafts, the Boynton & Plummer traverse shaper and turning the milling machine so the shaft is parallel with that of the planer. These items have been done. It is necessary to calculate what the operating speeds would be for demonstration purposes. The lathe and shaper now operating are running about one fifth normal speed and similar operation should be used for the two new machines to permit easy viewing of the machine action by visitors. Our inventory of shafts, hangers, pulleys and other necessary items is fairly large, but selecting compatible items that will fit on one shaft size complicates the process. One wide pulley is needed to allow a single belt on the planer to move side to side as the motion is reversed with each cutting and return stroke. A clutch is needed to permit starting and stopping the milling machine. Ceiling joists are adequate to support a moderate size counter shaft but a support plank will have to be hung to provide flexibility in locating the hangers near the driving pulleys. The next step is to start collecting the hardware needed and preparing it for use. A shaft, hangers and clutch from a recent donation have been tentatively selected from inventory. These will have to be inspected and refurbished before use. This looks like an interesting project for fall and winter.

The planer has now been examined in more detail to understand the belt shifting and stepping systems. There is a sliding bar on the right side of the base which can be moved by a hand lever. A bell crank pinned to the bar connects to a belt shifter bar that moves the belt across the face of the three pulleys, alternating between cutting and return strokes. This is also a means to start and stop the planer by shifting the belt to the idler pulley. It appears that a previous fix added or modified one or more of three holes in the shifter bar. The bar appears to have been made by a blacksmith rather than a machinist as it is guite rough in appearance and may be a replacement. The bell crank was bolted to the wrong hole to get full coverage of the three belt pulleys. The correct hole needed to be tapped and the slotted hole in the bell crank enlarged for the oversized bolt that had been used. Further examination revealed the stops on the planer platen are missing for automatic reversing of direction. But there is a shaped lever that is linked to the above mentioned sliding bar and a dovetail along the side of the platen, indicating what type of stops were used. Design of new stops has been visualized but they will have to be made and tested. The operating lever has a slotted extension for attaching the stepping mechanism that moves the cutter progressively across the piece being machined. A rod bolted to the slotted extension is pinned to a round disc on the cross feed screw. Each step is limited to something less than one half a revolution of the feed screw which has six threads per inch, making maximum feed per cutting stroke about 1/16 inch. The cross rail is misaligned, being 5/32 inch lower on the left side. This appears to be correctable as each side is raised and lowered by a screw thread that is turned by a pair of bevel gears. The gears are positioned on a common shaft by set screws, one of which is broken off and may have loosened. These set screws are the old No. 24 - 14 machine screw size and will have to be replaced with new tapped holes and 3/8 - 16 set screws. There is not much more that could need correction on this early machine tool other than a thorough cleaning of the oily dirt that has served as a preservative. Target for completion of this project is the spring show May 4 & 5, 2013.

Members are reminded that completed Personal Equipment Storage Forms are required to be submitted by the end of October 2012 in accordance with Standing Rule No. 16 (see the QVEA web site for rules <u>www.zagrayfarmmuseum.org</u>). The form is available below and will be available at the September meeting and at the Show Trailer during the Oct. Show.

#### ZAGRAY FARM MUSEUM PERSONAL EQUIPMENT STORAGE REQUEST FORM

It is requested the following described item be approve	ed for long term storage at the			
Zagray Farm Museum (include make, model, serial no., color, etc.):				
Requested location:				
Owner (Print):	Date of request:			
QVEA accepts no responsibility for maintenance or pro	otection of stored personal items.			
Board of Directors Comment: Approved	Disapproved			
Signature:	Date:			

## **ELECTION OF OFFICERS**

A vote is held at the <u>general membership meeting</u> in October. An absentee ballot below can be used in lieu of attending the Oct. general membership meeting. Also acceptable is a ballot by email. Telephone calls are not acceptable. Absentee ballots should be mailed to the current President, Ned Tewksbury, 90 Park Road, Colchester, CT 06415 with a postmark <u>before</u> October 15<sup>th</sup>. E-mail ballots can be sent to <u>ntewks@sbcglobal.net</u> and need to be received <u>before</u> October 15<sup>th</sup>.

## **ABSENTEE BALLOT**

	<u>YES</u>	<u>NO</u>
GEORGE LEHR		
ED BEZANSON		
ART CHESTER		
DIANNE TEWKSBURY		
	ED BEZANSON ART CHESTER	GEORGE LEHR



#### From the Secretary / Editor – Dianne Tewksbury

I'm always looking for pictures for the newsletters and/or for our farm museum pamphlets. If you have any pictures of farm equipment, before and after pictures, pictures from the shows, whatever, please send them my way.

Thank you,

Dianne

Dianne Tewksbury QVEA Editor 90 Park Road Colchester, CT 06415

#### APPLICATION FOR MEMBERSHIP

QUINEBAUG VALLEY ENGINEERS ASSOCIATION, INC.



NAME		
STREET		
CITY		
STATE/ZIP		
PHONE		
E-MAIL		

DUES ARE \$20.00/YR PER PERSON. PAYABLE WITH APPLICATION. INCLUDES QVEA DUES AND INSURANCE.

RETURN TO: QVEA, 180 SOUTH PLUMB RD, MIDDLETOWN, CT 06457