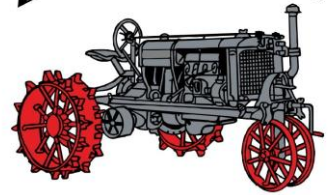


# QUINEBAUG VALLEY ENGINEERS

Zagray Farm



Museum

## The Zagray Quarterly

December 2019

### **PRESIDENT'S NOTES – GEORGE LEHR**

Our October show was overwhelmingly successful. It was the biggest/best show ever, not counting the HCEA show, with the new Tractor Building getting a lot of attention. As big as that building is, it was filled quickly. It seems that when every building we've built was completed, we quickly saw the need for more space. And so, the farm museum will continue to grow. Accordingly, the sawmill crew has been producing lumber for a new second Stationary Engine Building. As our shows and activities have grown and become more widely known, the farm has seen a greater interest by others in what we do there and an increase in donations.

The grading around the new Tractor Building and into the show field was going well and the footing/foundation for the pavilion was poured. Unfortunately, breakdowns in our hauling equipment have hampered our progress on those projects. With some repairs and some luck, things will get back on track soon.

I wish everyone a good holiday and hope to see you at the Mudslinger.

### **FROM THE DESK OF THE TREASURER – Art Chester**

There are a couple of spots in the new Tractor Barn available. A \$2500 donation will reserve an 8' by 22' space in the building. The building committee reviews and approves all spaces to ensure we have good quality, appropriate displays. Act now, as they will be gone soon!

Dues for 2020 are due and payable, and still \$20.00 per year.  
Lifetime memberships are \$500 and help the museum grow!

I will be sending out reminders to all who have spaces in the building for the yearly maintenance portion of their spaces. The building committee settled on \$75 for the first

space, and \$50 each for additional spaces. The funds are to help offset costs for electricity, insurance, and a soon to come IP camera system.

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. The 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 are set-up with Amazon Smile as well. This program donates ½ of 1 percent of eligible purchases to a charity of your choice. The pricing is the same on Amazon Smile as on Amazon. Paste or type this link <https://smile.amazon.com/ch/06-1426891> into your browser to connect to QVEA's page and get started!

# Saw Mill

Our emphasis is on producing the necessary materials for the second engine building. We can now store lumber under the rear shed roof of the new tractor building, giving us more room under the mill.

## SAW LOGS NEEDED BADLY!

Logs for the saw mill. In particular, 16'6" pine logs that are 20 inch diameter or more on the small end for rafters (10 logs needed), and four 24'6" logs of similar size if at all possible. Call Art at 860-982-5158 to haul.

Ned, Art, Dave and Joe working on a cold day to cut wood for the next engine building.



# Pavilion Building

The foundation is in place, as well as the pass-thru's for utilities and most of the backfilling. A broken steering arm on the Euclid stalled that out for the moment. We'll get back at it in the early spring.

# Pond Excavation

This project is well underway, thanks in no small part to Joe Turco, who has taken the lead here. As of this writing we are probably 75 percent complete with the excavation portion of the project. About 3,000 yards of material have been dug out with the draglines. Baldi Construction has been keeping up in the removal of the material once it is on dry land. Come spring we will need to do a 'dress-up' all around the pond. We have a donated catch basin and riser to install at the east end to set a maximum pond level. A trench and discharge pipe will need to be installed, as well as the dry hydrant setup provided by the fire dept.



*Joe Turco using his Bucyrus Erie.*

Joe had help from George Jarvis using his 80D before he dropped a battery on his foot - all because someone stole the one he was trying replace. Art got this shot before that happened.



# Tractor Building

We are moving things into the building to be set up on the mezzanine in the spring and thinking about how to display other items. We have also set up a consignment area at the west door where we can sell unneeded items and take in items from members to sell.

It works like this: Bring the item to the area, fill out a numbered tag and enter your info in the blue binder, along with minimum sale price. You need not be there to sell an item. 10% of the sale price goes to the Farm. See Art for more info



And Ned has been finding all kinds of artifacts to put on the mezzanine.



## ***Needed!***

Electrical help to complete the plugs and lights in the tractor building. electrical work to get a small panel and plug(s) in the Saw Mill, and plugs and lights in the new repair shop out back.

Trenching and piping help to install power, communications and water to the Pavilion.

Trenching and piping from the overflow basin for the pond to daylight. We need to locate (and repair!) the roof drains for the front of the engine building damaged during the pond excavation. There's plenty more – see Art.

## **ENGINES – CONNOR BISHOP & ETHAN BAILEY**

While things are slowing down at the farm, we are still keeping busy with farm projects. Our main project is a Northwest 80D crane that was donated to us by East Hartford Equipment. George Jarvis, Ethan, Bill Williams, and I have been working on the machine for the past two months to get it ready to be hauled to the farm.

When we first started working on the machine, the motor was stuck and we were worried that the project would end before it started. However, it was only lightly stuck and with a combination of bumping the starter and a prybar on the ring gear the motor freed up. We then discovered that two of the injectors had stuck fuel racks, so we swapped out the injectors and tried to start it without success.

Even with plenty of ether, the motor failed to even pop once. We figured that the rings were dry and losing compression, and later learned that the valves were not sealing well either. This problem was solved by pouring a quarter cup of oil into each cylinder, attempting to start it on ether, and repeating the process until the engine finally ran on its own. It now starts and runs excellent except for one lazy injector, which will be adjusted at a later time

With the engine running, we then tried to swing the machine so we could replace the broken track chain, which is the reason the machine was parked about 20 years ago. We discovered our next issue when we found that the machine would not swing



at all. As it turned out, the rod that toggles the swing clutches was frozen. The two swing clutches are on a large, 4" diameter hollow shaft and a solid shaft slides back and forth inside the hollow shaft to toggle the clutches. The OD of the inner shaft and the ID of the outer shaft are very close in size, so they rusted together. With a combination of torches, oil, and hammers, we freed up the toggle shaft and got the machine to swing.



Before the track chain could be replaced, it needed to be loosened up from the rusted, frozen position it was in and some damaged links repaired. Heat, oil, and sledgehammers loosened up the chain and some donor links from a similar chain replaced the broken links. Several other chain pins had bushings that were either severely damaged or broken completely off, so I made some replacements by cutting lengths of 1 1/2" iron pipe, slitting them in two halves, and re-welding them in place around the pins. The chain was then replaced onto the machine, and for the first time in 20 years, the machine walked out of its grave under its own power! There is a video of the process up on our YouTube channel for those interested.



The guys at East Hartford Equipment also decided to donate some smaller items to us, such as several palletized rolls of shop towels, pallets of boxed and organized equipment manuals, shelves of bolts, nuts, large sockets, wrenches, and two huge hydraulic presses.

I also have been continuing to work on 200PSI air compressors for our air starting needs in the engine building. Our green Quincy compressor that let us down right before the Fall Show by making only 50PSI has been taken apart, and I found a large amount of rust and contamination in the high stage cylinder. It seems that the head unloader for that cylinder was rusted into an open position, allowing the compressed air to escape back to the intake rather than being compressed into the tank. As time, weather, and daylight allows, that compressor will be re assembled and tested. Even if the problem is fixed, we do need at least one more compressor for our next engine building, which is in the works for the coming year. Keep an eye out for heavy duty industrial high-pressure compressors for donation!

Our Atlas Imperial diesel engine did run during the Fall show, but only for a few short runs. It would start and run well but would easily overspeed itself. After the show Ethan and I spent more time getting it tuned. Firstly, the fuel rack was very sticky and did not move smoothly, so the governor was not able to move it properly. Also, some set screws had fallen out of the governor assembly itself preventing it from working. The last issue was one we had before – I had followed the instructions in the Atlas manual to adjust the injectors! Just like the poorly written instructions for adjusting the intake, exhaust, and air start valves, the instructions for injector adjustment were no better. After these three issues were resolved, the engine runs very smooth and slow.

It's been a busy year at the Farm, and another busy year is ahead of us! If you're interested in getting more involved with the Farm, make it a New Year's resolution to stop by and see what you'd be interested in helping out with.

Merry Christmas and Happy New Year!

### **From the Editor, Dianne Tewksbury**

**Tentative date for the 2020 Mudslinger will be Saturday, April 4**

**2020 Show Dates are: May 2-3, July 18-19, October 3-4**

All the Bezanson kids (from left to right) Brendon, Myles, Patrick and Natalie. Brendon, Natalie & Patrick are a big help directing traffic to parking areas during shows. Myles still prefers the play area with Landon or riding tractors with his Dad.



And, here is Connor's new ' Jr. Engineer'.



***HAPPY HOLIDAYS EVERYONE!!!***

Dianne Tewksbury  
QVEA Secretary & Editor  
90 Park Road  
Colchester, CT 06415

**APPLICATION FOR MEMBERSHIP**

**QUINEBAUG VALLEY ENGINEERS ASSOCIATION, INC. (QVEA)**



NAME \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_

STATE/ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

E-MAIL \_\_\_\_\_

Dues are \$20.00 per person for one year, payable with application.  
Dues include liability insurance at the farm.

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