

Community Timber Frame Raising

By: Katee Rose

“How wonderful the community is when there is an event like this. When we need hands, everybody shows up. When someone needs help, like during the floods a couple weeks ago, someone is sick etc...the community comes together and takes care of itself.” says Andrew Norcross, the mastermind behind the design of the breathtaking new community timber frame recreation shed that was raised this last weekend in Finland. A crew of students and instructors, alongside several community members, gathered this last Saturday, May 21st to raise the new structure at the Clair Nelson Center. “Everybody brought potluck food and stayed and helped until it was done. It was pretty cool,” Andrew says.

Andrew learned to timber frame alongside experienced timber framing friends in North Carolina. Shortly after, he purchased property and started to build his own. Over the years he has developed quite a knack for the age-old trade and has since moved to the area and started his own timber framing business out of Finland called Sonju Lake Timber Framing.

The staff at the Clair Nelson Community Center in Finland have been talking about wanting to get an upgrade for the rec shed for years. The shed they had been using was rapidly deteriorating, and after a leaky roof they decided to invest in something bigger and better to fit the community's needs that would last. The conversation about what uses they needed the building to serve dictated the size growth. Made bigger, taller, with more storage up high, and including an outdoor play area for the kids that will be a bit more out of the elements to hopefully get more use out of a play place during the changing seasons.

The new building has an exterior dimension of 8'x16' and will be sided with white pine boards with a traditional looking lap siding and trim around the windows and corners. The roof will be metal to match the pavilion it sits across from. Rick Lindberg is also working on building the doors out of repurposed materials.

This structure was built to replace an existing shed that has been falling apart and was repaired for years. The space will facilitate storage and organization space for youth night, tennis court activities, the Finland Farmers Market, picnic tables, skate ramps, bikes, skateboards etc.

“All of the things that get used outside at the Rec Center area can have an organized home within this structure,” say both instructors Norcross and Pollard. This will make using these things more accessible. “Having the stuff stored in a location where they can just get pulled out and used is really important,” comments Norcross.

Andrew has had the project in mind since last fall and approached fellow timber framer and friend Jenna Pollard to inquire if she would be interested in turning the building into a workshop and co-instructing it with him. She, of course, was all in!

Jenna first got into timber framing in southern Minnesota in 2010. “I got lucky. I was working on a farm that was building a timber frame and they needed help, so they asked me if they could teach me how to do it so I could help out.” She then did some of her own projects, including building her own timber frame cabin, and learned from her mistakes. Folks started catching wind of her skills, asking her questions, and that was when she got the idea to start hosting classes. “Not everyone is gonna be lucky enough to just bump into people that have timber framing skills and also the patience to teach them how to do it,” says Jenna. She believes classes are a way to make it more accessible and more available. The flip side to that is not everyone has the money to go learn how to timber frame. “So finding collaborations where there are scholarship opportunities has been awesome. I have been able to provide scholarships for all the classes I've ever hosted.” She has taught workshops from the state of Arizona at the Canella project all the way to the Steger Center in Ely, Minnesota.

The pair received support from the Friends of Finland to be able to offer scholarships for the Timber Framing class to help work on the community rec building. Two lucky locals were able to take the class free of tuition. Rick Lindberg was one of those participants. “That was awesome, we got local participation... keeping these skills propagating within the community,” says Jenna.

Originally from South Dakota, she first came to Finland as a Wolf Ridge Naturalist in 2012 and fell in love with the area. She kept coming back,



A crew of students and instructors erecting a new community timber frame recreation shed at the Clair Nelson Center in Finland, MN. (photo by Katee Rose)

got asked to help with projects and did. Eventually buying her own place in town and is now a full time resident of the area.

Both Norcross and Pollard developed the workshop for the project and invited students to come learn with them from May 14th to the 21st. In those days, 5 folks learned the basics of timber framing, gained experience laying out, cutting joinery and assembling the frame together. Before the workshop started, the instructors prepped for the class by starting to make cuts a couple days a week about a month ago. The rest of the joinery was worked on for the last week of timber framing class with the students. The lumber was purchased locally from Hedgestroms in Grand Marais. Andrew says, “it's all local wood, and it's a small family business so we're happy to support them”.

“We did the whole workshop by hand, with hand augers, chisels and hammers, pencils and rulers. We had students buy what we thought were the basic timber framing tools just so now that they've taken the class, they go home and they have the tools right there,” says Jenna.

There are 2 sets of tools when building a timber frame. The layout tools that allow you put the markings on the timbers to show you where to cut and put your mortise (female) and tenons (male end that fits into the square cut matching female receptacle), the joints are then locked in place with the addition of hardwood dowels or pegs called trunnels. Then you have your cutting tools for making the joinery in the frame. Layout tools would be a framing square, pencil and tape measure. Cutting tools include a very sharp handsaw (which can be old as teeth can be sharpened), a 1 _ or 2 inch framing chisel, rawhide or wooden mallet, as the handles of the chisels are wooden. There are other tools that may make the process more efficient, but these 6 tools are the basics.

Norcross shares that there is as much joinery in this structure as there would be in something twice or three times its size. “I designed it like that because I started the design phase on my own, and I just love doing really whimsical, fanciful designs with sheds coming off of it, and using as many weird joinery combinations as I can... Generally they are pretty boxy, straightforward and simple. I like to push the limits of what people expect out of joinery that doesn't have any metal fasteners,” says Andrew.

“The side effect of the complicated joinery for our students was they had to wrap their head around some more advanced joinery.” But Jenna says they had a lot of really creative thinking students this year and it was inspiring for them to not just see the basis of timber framing, but to see what one can do with it. Expanding people's understanding of what's possible. Some really cool stuff. “This is probably one of the most beautiful sheds in history,” jokes Jenna. One of the students, Mark Reis-Henrie, says, “I learned a lot in the course and am proud of the work that I was able to complete. It was a fun and rewarding experience...I learned a ton during the course and recommend it to anyone, without reservation”.

Here's a funny part of the story... Due to weather conditions, the slab for the foundation was unable to be prepped and poured in time for the raising. But, the show must go on! The class had been scheduled already with students coming from out of the area, so there was no way to reschedule that part. The plan you ask? Build a temporary platform, move forward with the raising, and get a 8 ton crane truck (supplied by Norcross) to pick

up the entire structure (Andrew guesses is around 10,000 pounds) and place it onto its final resting place once the slab is done and ready to go! “Everything will have to be secured together and lifted with straps and getting them all the right length,” says Norcross. They anticipate the project to be finished by July of this summer.

Its final resting place will be alongside the tennis courts. The fence will be pulled back so the building can be accessed from both the front and the back. The team even dug up and relocated the grape vines that find their home on the tennis court fences each summer. “No grapes were harmed in this project,” jokes Jenna. In true Finland form, saving the grapes!

“It's a perfectly practical way of building that saw a bit of a resurgence in the 70s but it's been alive and kicking for a long time at this point,” says Andrew. One big timber framing project in the public view right now is the rebuild of the Notre Dame Cathedral. The roof system was timber framed centuries ago and that is what burned in the fire last year. It is now being rebuilt by people who practice the trade in Europe. Timber framing and joinery has been a part of many cultures all over the world. “The craft itself is as old as wood and hands,” says Andrew.

There are a couple different trees in the world that are the best for timber framing, but it depends on the region and which tree grows where you live. Here it is White Pine, in the pacific northwest its douglas fir, in England its oak, and that's because they don't have a lot of conifers there. The craft is developed around the material.

Jenna suggests reading Jack Stogens books from cover to cover. She says it's a really good primer in understanding wood, the history of timber framing and some basic joints. She will be teaching more classes this summer. One will be at the Steger Center in Ely and is an all women's workshop. There is currently a waiting list for the timber framing course, but there are still spots available for a dovetail cabin course her friend Noah is teaching there as well. There are other all womens courses this summer being taught at the center, from finished carpentry to stone masonry. You can find more information about the courses offered at the Steger Center at <https://stegercenter.org>. She will also be co-instructing in Washington state later this season to work on building a timber frame pavilion for a community there with 12 students enrolled in the course. “Being in Finland and living in Finland and building something that's going to stay in Finland was awesome,” she says

“Since this is a community space, whenever things are happening here and the word goes out for help people come out and really show up. I just really love that. It speaks to the community and it's why investing in the community with a new structure is a totally reasonable thing to do, because it's a long term solid community that's going to keep going and we might as well have structures that reflect that cultural strength.” comments Norcross. You can find more information on his timber framing business at <https://slstimmerframe.com>

This project is partly supported by a grant from the Lloyd K. Johnson Foundation, but also needs to raise additional funds to complete the project. Donations can be made online at GiveMN.org or by mailing a check to Friends of Finland, PO Box 582, Finland, MN 55603. Be sure to make a note in the memo for this project.