Keeping Timber Frame Techniques Alive

An Illinois business is so dedicated to preserving old barns that it has a "Personals" section for barns on it's website, trying to match old timber-framed barns with new owners. Trillium Dell Timberworks doesn't get money for selling the barns, but often contracts to move and restore the buildings.

"We try to save barns by matching existing owners with new owners," says Tim Narkiewicz, one of the business's project managers. He emphasizes that Trillium Dell is not just a barn restoration company; it's a timber frame construction business with employees skilled in various styles of wood joinery with mortises, tenons and wooden pegs. Trillium Dell's mission is to preserve that building style by putting up new buildings and restoring old ones.

In the last couple years, projects have included many restorations of barns and historical mills, Narkiewicz says. Customers include individuals, businesses and public agencies that have parks or museums and are interested in restoring, repurposing or moving old buildings.

For example, one family donated a pre-Civil War barn to a heritage farm. Other customers want old barns transformed into homes, studios, or garages.

The best option is to restore buildings right where they are, Narkiewicz says. For example, if a barn doesn't serve a farmer's needs, it can be altered with taller doors and have loft beams removed to make room for big farm equipment.

The next best option is to move the building intact, but that isn't practical to do

for more than a few miles. The final method is taking the barn down, transporting it, and reassembling it at a new location. Besides taking it apart piece by piece, Trillium Dell has developed a system of cutting the building in 8 or 10 ft. sections that can be transported easily on a semi.

"There's a lot of engineering and rigging to take a barn down safely," Narkiewicz says. Trillium Dell also builds with new materials from wood the company purchases near its Knoxville, Ill., 80-acre campus. Builders can replicate the look of the timbers down to specific saw marks, and building new is often the most cost effective option.

"Once a barn requires 30 percent replacement, you could build a new barn for the same price and labor," Narkiewicz says. "Typically there has to be another reason to restore a barn with more than 30 percent restoration required. Usually because it's a building with historic or nostalgic importance.

Some customers, such as the Antique Engine & Tractor Association of Geneseo, III., choose to build with new materials. Members hired Trillium Dell to build a 48-by 70-ft. clubhouse out of local white oak. They held a modern day barn raising.

While much of their work is in the Midwest, Trillium Dell crews travel all over the U.S. and beyond to places such as the Virgin Islands. They shipped one timber frame building to Switzerland.

Project managers assess a barn and offer recommendations to barn owners or help in the design of new ones.



Dan Servideo recently used his loader-mounted post clamping device to pick up and place 8 5/8-in. sq. pressure-treated posts.



Double-nutted, 1-in. dia. threaded rod tightens device to bucket lip (left). A post holder with angle iron sides is then attached to threaded rod.

Loader-Mounted Post Handler

"It lets one person handle a big wooden post without help or doing any physical lifting," says Dan Servideo, who came up with a post clamping device that attaches to a post loader bucket. He recently used it to pick up and place 8 5/8-in. sq. pressure-treated posts used to build a 6-post carport.

The device freely rotates, so if the post is clamped off center, it automatically lines up vertically and can be placed into a hole in the ground.

A double-nutted, 1-in. dia. threaded rod is used to tighten the device to the lip at the center of the bucket. A post holder with angle iron sides - which is free to rotate - is then attached to the threaded rod. The post holder is tightened with 4 bolts that extend through one of the angle irons. For smaller posts, a "spacer board" can be added inside the post holder and tightened down using bolts on the opposite angle iron. A safety chain attached to the post holder is then wrapped around the post.

"I came up with the idea because help is difficult to find, and there was no way my wife and I could lift and place the posts," says Servideo.

Contact: FARM SHOW Followup, Dan Servideo, Green River Farm Millspring, 10103 Hwy. 108 E., Mill Spring, N.C. 28756 (ph 828 894-3431).



Trillium Dell Timberworks contracts to restore old timber-framed barns, or build new ones. Building shown above was what the broken down building, below left, turned into.



The work is very satisfying, Narkiewicz says. Besides preservation, timber frame buildings can be built with modern efficiencies and be around for generations.

"We can build a product that far exceeds the life cycle of trees we build with,"



Narkiewicz says.

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Dale Herigon used old galvanized water pipe to make this new tailgate for his pickup.

"Made It Myself" Tailgate e Herigon needed a new tailgate, 1/4-in. for more strength.

When Dale Herigon needed a new tailgate, some old galvanized water pipe came in handy. With a little welding and trimming, he had his tailgate. Add a little fresh paint, and it matched his truck perfectly.

"I used the existing hinges from the old tailgate and modified them so when the gate is opened part way, it can be lifted in and out like later models," says Herigon.

Building the gate itself was easy, says Herigon. It just took a little welding. Most of the pipe was 5/8-in., with the bottom 1

How To Make A Magnetic Sweeper

"I used 6 flywheels off lawn mower motors to make a magnetic 'floor sweeper' that picks up nails, metal shavings and other parts scattered across a wide area," says Orland Thuroo, Hanna, Alta.

"Just insert a 1/2-in. threaded rod through the flywheels and bolt them down tight. Leave enough rod at each end to bolt onto the handle of a lawn mower. Use lawn mower wheels that are larger than the flywheels to mount on each end. Just bolt them on without tightening down so it holds the magnets just off the ground. It's a cheap floor sweeper To latch the new gate, Herigon welded short

lengths of pipe to the backside of the tailgate ends. With a little heating, pieces of 3/8-in. rod were easily bent in J-shapes. The long legs sit in the pipe sections, and the J-end slips into the stake pocket hole.

"It was a quick fix," says Herigon. "I started it one afternoon and was finished the next." Contact: FARM SHOW Followup, Dale

Herigon, 15801 Rt. B, Meta, Mo. 65058 (ph 573 477-3449).

that really works great. "To make a magnetic pick up tool, just cut

a magnet out of a flywheel and fasten it to the end of a wood handle. Great for picking up stuff in remote locations that you can't reach.

"Another way to use magnets is to bolt them onto a metal carpenter square so they're flush to the outside. Makes it easy to clamp the square to whatever you need to weld square, eliminating the need for clamps."

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