**Nolt's hitch uses a nylon 3/8-in. rope for the tractor operator to control from the seat. Pull the rope, and the trailer unhitches. Once you release the tension, the hitch resets itself, making it possible to use it to hook up trailers as well.**

# Auto Hitch Makes Hookups Easier

Irwin Nolt of East Earl, Penn., has designed a hitching system that makes it possible to hook and unhook tractor-trailers without getting up from the seat. This system saves valuable time in the field and keeps him out of reach of potentially dangerous equipment.

Inspiration for this hitch design came to Nolt after a childhood where he was responsible for hooking the hitches himself. "As a little boy, until about 12 years old, it was always my role to hook and unhook our farm trailer. One day I had a lightbulb moment - there has to be a better way to do this!"

Nolt took some time to think through the logistics and made his prototype about 15 years ago. He has been using his finalized hitch ever since. Word got around, and it's now a popular choice among his friends and neighbors.

The hitch itself is made from bar stock steel that Nolt forms in his shop. It includes a nylon 3/8-in. rope for the tractor operator to control from the seat. Pull the rope, and the trailer unhitches. Once you release the tension, the hitch resets itself, making it possible to use it to hook up trailers as well.

At present, Nolt sells about 25 to 30 of his custom hitches annually. Most business is local and through word of mouth, but he also ships. The price per hitch is $180, plus shipping.

Nolt believes his system offers an improvement over commercial models available today. His design is less flimsy and will withstand years of heavy use for hooking and unhooking hay wagons, gravity bins and more.

Contact: FARM SHOW Followup, Irwin Nolt, 175 Weaver Land Valley Rd., East Earl, Penn. 17519 (ph 717-355-2893).

**Stover's workshop was made using four shipping containers with a crushed rock floor and hoop house roof.**

# Workshop Built From Shipping Containers

FARM SHOW reader Craig Stover spent six years, on and off, constructing a workshop by combining a hoop house with old shipping containers.

To date, the structure consists of four shipping containers, each 20 ft. long. They are situated on the corners of a rectangle measuring 32 by 50 ft., with 16 ft. between the pairs of containers. Everything rests on a crushed rock floor, and a hoop house set up overtop adds versatility to the workshop.

Part of the structure is covered by an insulated ceiling. "I plan to heat the 16 by 20-ft. area under it on cloudy days," says Stover. "On sunny days, no heat is necessary, thanks to the structure's greenhouse effect." The workspace can get quite hot in the summer, so Stover adds a shade cloth to the west side to cool things down.

Building the workshop was a gradual process. Stover bought the four containers off Craigslist over six years. They averaged about $2,000 each, though he expects the price would be higher today.

He purchased the tubing for the roof online through a fencing company for about $2,000. Other materials, like plastic, lumber, hardware and the wiggle wire channel for the roof, added another $1,000, while the crushed rock flooring was $500. Stover sourced a 14 by 14-ft. overhead door free from a friend and was able to use his backhoe, tractor, dozer, and 60-ft. boom lift to aid the project.

While there's no electricity installed, Stover runs a diesel generator with an extension cord from an adjacent greenhouse when power is needed. He also uses a Miller gasoline-powered welder for many projects.

When Stover considers his progress so far, he notes that he would do things differently with the hoop house if he were to start again.

"The hoop house roof needs to be bowed outward (not straight tubing like it is now) to keep the plastic from billowing in the wind. It also needs more bracing to accommodate the snow load. Therefore, I plan to turn the tubing (that the heavy snow in January bowed in) 180 degrees, so it bows out. Then brace it with steel braces to the top of the containers to strengthen it."

Despite some setbacks with the roof due to heavy snow that will require repairs this year, Stover is still progressing on his workshop and is optimistic he will continue to perfect the design even if it takes a while.

Contact: FARM SHOW Followup, Craig Stover (ph 860-982-7596; cstover2506@gmail.com).

**Stake Sharpener can produce up to 300 sharp stakes an hour.**

# Machine Makes Sharp Stakes Fast

Need wooden stakes fast? Get the Stake Sharpener from Hud-Son Forest Equipment. "Survey stakes and stakes for silt fence around construction sites are our biggest markets," says Mike Spadaro, Hud-Son Forest Equipment. "We also have some users in the market garden business."

Whatever the use, the Stake Sharpener can produce 300 sharp stakes an hour.

The sharpener comes in two models powered by electric motors. The 1-hp. electric model with a 110-volt motor offers a 1 1/2-in. hub capacity. It's priced at $2,695. The 3-hp. model with its 220-volt motor has a 2 1/2-in. hub capacity and is priced at $3,495.

Contact: FARM SHOW Followup, Hud-Son Forest Equipment, P.O. Box 345, 8201 State Rte. 12, Barneveld, N.Y. 13304 (ph 315-896-7297; toll free 800-765-7297; info@hud-son.com; www.hud-son.com).

**"Our BioRoter, combined with a biomass-fueled furnace or boiler, can create a biosecure, closed-loop on the farm," says Wiebe. "Load it up in the morning, and 24 hrs. later you can unload material with 10 to 15 percent moisture, ready to be burned with wood chips or other biomass."**

# Closed-Loop "BioRoter" Creates Perfect Compost

Use waste heat to dehydrate dead animals and then use them to fuel your biomass boiler, producing more heat. The closed-loop system is only one way the BioRoter Dehydrator from Triple Green Products can be used. It can also be used to compost dead animals to capture the nutrients for spreading on fields.

"We introduced the BioRoter Composter/Dehydrator a year and a half ago, but we have been focused on our BioDryAir system for grain driers (Vol. 46, No. 1) and our biomass boilers and furnaces," says Lyall Wiebe, Triple Green Products. "In the past several months, we have started promoting the BioRoter Composter/Dehydrator, and we are getting a lot of interest. That is especially so in areas being hit by avian flu."

Wiebe notes that biosecurity is a major challenge for livestock operators having to dispose of a barn full of birds. Using rendering services means potential contamination as outside trucks enter a secure area.

"Our BioRoter, combined with a biomass-fueled furnace or boiler, can create a biosecure, closed-loop on the farm," says Wiebe. "Load it up in the morning, and 24 hrs. later you can unload material with 10 to 15 percent moisture, ready to be burned with wood chips or other biomass."

BioRoter Composter/Dehydrators are available in a variety of sizes and prices starting in the high $30,000 range. Wiebe suggests that if used strictly for dehydration, the smallest 3 by 8-ft. unit is sufficient for even a decent-sized poultry or hog facility.

"If using as a composter, you need a larger system, as the mortalities are mixed with a bulking agent, such as wood shavings, and can take 14 days to compost," he says. "Our largest system is a 6 by 50-ft. unit that can be used for either composting or dehydrating. There are a great many options and variables available, such as heating systems, discharge screens, grinders, augers and sensors. We build to suit based on the operation."

The BioRoter has a robust, stainless steel, U-Trough ribcage design. Stainless steel panels provide longevity in processing corrosive and acidic waste. Side support arms and extra heavy-duty front and back walls are carbon steel and powder coated. The oscillating, spiraled paddle tine and central shaft are powered by variable frequency drive electric motors paired with proprietary, multi-stage planetary reduction drive gearboxes and a double chain sprocket system. An optional PLC panel controls loading and mixing, including temperature and moisture data tracking and recording. It also allows for remote monitoring and the addition of heat, oxygen and water as needed.

If used with swine mortalities, a grinder is added, explains Wiebe. It reduces the size of the animal while taking care of bones, etc. The ground material is then augered into the composter/dehydrator.

"Whether in compost or dehydration mode, the key is the consistent mixing and turning provided by the BioRoter," says Wiebe.

He adds that while designed for mortalities, the BioRoter is also attracting attention from large dairy operations.

"They are looking for efficient ways to dehydrate solid waste materials for use as bedding, or pelletizing and sale as organic fertilizer," says Wiebe.

Contact: FARM SHOW Followup, Triple Green Products, Box 119, R.R.1, Morris, Manitoba, Canada R0G 1K0 (ph 204-746-6333; toll free 855-373-2378; info@triplegreenproducts.com; www.triplegreenproducts.com).