Chest Freezer Made Into Root Cellar

If you have an old chest freezer you plan to dispose of, consider turning it into a small root cellar. John Halzwart of Sheboygan, Wis., took on the project and has been enjoying fresh kale and potatoes throughout the winter since he made it.

Root cellars work by using the earth for natural cooling, humidifying, and insulating. They must be cool, dark, and well-ventilated. The north side of a building works best, but anywhere that doesn't get much direct sun will work. "I ensured proper air exchange by installing one PVC pipe that enters the freezer high and another PVC pipe that enters the box low, just like with a regular modified chest freezer in dirt up to its lid."

Success with a chest freezer depends on filling the base with material that preserves its contents without moisture retention. Says Halzwart, "I added drain holes, a layer of gravel, and a foot of coarse sand to the interior of the freezer,"

Halzwart uses his root cellar primarily for preserving potatoes, which he stores from early October through the middle of May. "The potatoes make it through the winter in sand and not a single one goes mushy." His setup worked especially well as a supply of fresh greens. "I took kale cuttings in the fall and rooted them in a bed of sand over winter," he explains. "I did add a dusting of rooting



"I ensured proper air exchange by installing one PVC pipe that enters the freezer high and another PVC pipe that enters the box low, just like with a regular root cellar," Halzwart says.

hormone to the surface of the sand before sticking the cuttings in. When the temps were above freezing and sunny for an extended period, I opened the lid; when below freezing, I would close it. By spring, I had a pile of rooted cuttings to plant in my garden."

His setup has inspired him to move forward with more chest freezer projects. "Currently, I'm in the process of putting in a larger freezer on another property I own," he says. "I hope to try storing apples and carrots in the future."



Retrofit Doors For Old Silos

Wisconsin Silos makes replacement swinging doors for concrete and concrete stave silos. They also repair and replace doors and parts. In many cases, the replacement doors are superior to the originals, with three locking latches and steps on 12-in. to 16-in. intervals.

"We provide the frame, the door, and step mechanism for self-storing doors in concrete silos," says Bruce Johnson, Wisconsin Silos. "We also have silo doors and hardware for concrete stave silos."

The replacement doors all meet American Society of Ag Engineering standards. The self-storing doors for poured-in-place, opendoor column concrete silos replace olderstyle stacked doors where the doors or the metal across the opening deteriorates.

Stave silo doors are made in all sizes to fit different makes of silos. The door steps are 16 in. wide and 15 in. apart with 7 in. of toe space. Locking latches are standard, and doors are made of tongue and groove cedar stapled with rust-resistant fasteners. Three different depth latches are available to match the OEM latch depths to ensure a tight seal.

"Our latches are designed to lock, so they can't be opened accidentally," says Johnson. "They have to be unlocked to take the door out and to prevent accidentally kicking the door in when climbing."

Johnson advises calling for pricing depending on the type of silo and the hardware used. Prices generally range from \$70 for a 3-bracket door for the company's poured concrete silo to \$200 for cedar doors with locking latches and steps. A fully



Stave silo replacement door.

installed system with door and hardware can run \$250 per door. Johnson emphasizes that doors are key for operator safety and effective silage storage.

"It's important to have good doors and hardware when climbing a silo," says Johnson. "Used doors are often available, but they can be unsafe, which is why we don't deal with them."

Contact: FARM SHOW Followup, Wisconsin Silos., 3700 Post Rd., Plover, Wis. 54467 (ph 715-570-0069; toll-free 800-472-9202; info@wisconsinsilos.com; www. wisconsinsilos.com)



Shelato takes orders to build garden-tractor duals and has shipped all over the U.S.

How To Add Duals To Your Garden Tractor

Chuck Shelato of High-Noon Duals has designed custom clamp-on duals for tractors. "To begin, I was trying to level out some dirt around our tree with a Husqvarna tractor," he says. "While dragging an I-beam, or attempting to, I spent too much energy rocking side to side in the seat. I couldn't make a lap without the rocking."

Shelato attempted to find a supplier for duals to stabilize the tractor. When he came up short, he looked for ideas on YouTube. "There wasn't much," he says. "What I did find had flaws in the design or application. So, I made my first bolt-on style set of wheels."

He posted pictures of the final product on Facebook, generating much interest. Some people messaged Shelato directly, and he made them custom sets. Over time, this expanded to several other styles of duals and custom spindle hubs. He also made his own fixtures for assembly and quality control.

A recent project was rear duals for the customer's son's project tractor. "He specifically asked for ready-to-ride options," says Shelato. "It included tires, rims, extensions, and hubs." Parts and materials cost nearly \$1,000. Shelato estimates that he spent 4 hrs. researching for fittings specific to the tractor, 4 hrs. shopping and searching for materials, 3 hrs. fitting and welding the axle extensions, and 2 hrs. making the hubs and brushings before finally mounting the tires.

He's taken on many projects since. "At this point, I do all of my production," he says. "That helps tremendously in keeping cost down and marketing a guaranteed quality product." Shelato takes commissions to build duals in-house and ships them to both coasts. He's made them for both show tractors and working tractors, including the Kubota BX series, the JD 1000 series, front deck commercial mowers, and zero-turn mowers.

You can contact him directly for availability and pricing information. "My only advice to anyone who wants to make their own is to focus on concentricity."

Contact: FARM SHOW Followup, Chuck Shelato, High-Noon Duals, Salisbury, N.C. (ph 704-798-5014; Facebook: High-Noon Duals).

Leaf Blower Repowered With Harbor Freight Engine

For \$25, James Johnson got a blower that clears leaves off his driveway. While it was a good garage sale buy, the \$100 Harbor Freight engine he added later made it a real bargain.

"When I first got it, I jury-rigged the blower with its old engine to the front mounted mower on my Gravely and later to a frontend loader on an IH Cub," says Johnson. "It wasn't the nicest looking, but it worked. However, it got expensive to maintain. I spent more time trying to get it running than using it each year."

He mounted the blower and engine to a flat piece of steel. To attach it to the Cub's bucket, he fabricated a mount using a 20-in., 1 1/2 by 4-in. length of channel iron. One end is bolted to the flat plate. The other end is welded perpendicular to a length of 1 1/2 by 4-in. angle iron that fits over the bucket edge, while the channel iron extends under the bucket. He hooked two ratchet straps to eye bolts on the angle iron and to the top edge of the loader bucket to secure the cantilevered blower mount in place.

When he traded in the Cub for a Kubota with a loader, he replaced the engine. After struggling with the old engine for about a dozen years, he hooked the blower to a 6 1/2-hp. engine from Harbor Freight.

"I've used it with the Harbor Freight engine



Johnson upgraded his garage sale blower with a 6 1/2-hp. Harbor Freight engine and mounted the unit to the bucket on his tractor.

for the past 3 years without a problem," says Johnson. "It starts on the first or second pull every year, and I clear the driveway. I could use it on leaves on the lawn too, but I don't worry about them. I only use it for about 3 hrs. a year, so I didn't want to put a lot of money into it. It works well just cleaning my long driveway."

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