

## “Mud Hog” Grain Cart Pulls Easy, Reduces Compaction

Grain carts equipped with Mud Hog 2-speed hydraulic-driven axles reduce both fuel use and compaction, says an Indiana company that offers the axle drive on five models of J & M grain carts. It works with the electronics on Deere Series 30 and R tractors. Case introduced a patch for its electronics in 2012.

“The Mud Hog drive axle has proven itself on combines,” says Darren Foster, Terra Drive Systems. “We supply OEM installed axles to just about every major brand and we make aftermarket Mud Hog drive axles for their combines.”

The Mud Hog requires minimum hydraulic pressure of 3,000 psi and a flow rate of 30 to 35 gpm. The add-on axle’s low speed offers high torque for heavy going, while the high speed offers lower torque with its greater ground speed. You change speeds with an in-cab, on-the-go switch.

“The Mud Hog will supply about 105 hp to the ground when it’s engaged,” says Foster.

Foster notes that today’s large tractors commonly have hydraulic systems running at 4,000 psi and 60 gpm flow.

“Switch on our axle on a grain cart with our minimum flow, and pressure will slow the tractor down to 3 to 4 mph when the system is engaged,” explains Foster. “Engage the axle on a tractor with 60 gpm flow, and it can run up to 8 mph.”

The axle lowers fuel use and compaction by eliminating or at least minimizing slippage. Foster says reduced compaction can be seen in soft soils.

“If the tire track is 3 in. below the field surface and you switch on the drive, the track depth will drop to 1 1/2 in.,” says Foster. “It also reduces compaction caused by the tractor pulling it. If you have a monitor in the cab, you can watch the slippage and fuel use drop when you engage the drive axle.”

According to Foster, the Mud Hog can be retrofitted without affecting the scale system.



Grain carts equipped with Mud Hog 2-speed hydraulic-driven axles reduce both fuel use and compaction, says an Indiana company that offers the axle drive on J&M grain carts.

Simply unbolt the existing axle, replace it with the Mud Hog and run hydraulic hoses and electrical cable to the tractor. List price installed is \$25,000.

A video of the Mud Hog drive axle on a grain cart can be viewed by visiting [www.farmshow.com](http://www.farmshow.com).

Contact: FARM SHOW Followup, Terra Drive Systems, Inc., 9098 W. 800 S., Brookston, Ind. 47923 (ph 219 279-2801; toll free 800 348-2474; [www.tdsdrive.com](http://www.tdsdrive.com)).

## Culvert Used To Make Solid Stock Tanks

When Gene Baumgardner needed water tanks for beef cattle on his Jeffersonville, Ohio farm, his father-in-law, John T. Ricketts, suggested using a 4-ft. dia. concrete culvert that had been sitting in the weeds on his farm for years.

Baumgardner’s nephew, J. L. Draganic, designed a system of nine paddocks to keep cattle out of flood-prone low ground and a nearby creek. They installed two watering tanks fed by an artesian well to cover all the paddocks.

“We had a local company that does concrete sawing cut the culvert in two, but you could do it yourself with a concrete saw,” Baumgardner says. Each half was set into the ground to leave 30 to 32 in. of the concrete above ground. They packed the ground well

and covered the bottom of the tank with gravel around the pipes.

“We bought a gallon of concrete adhesive and spread it on the walls of the culvert to ensure a good seal between the floor and walls,” says Baumgardner. “We used Quikcrete to pour a floor 3 to 4 in. thick. We have stainless steel and brass fittings set into the bottom so we can replace the pipes as needed.”

Each tank holds between 150 and 200 gal. and water flows in about 2 or 3 gal./minute, which is enough to keep the tanks open in the winter and algae from growing in the summer. An overflow pipe inside each tank takes extra water to a nearby swale so that the area around the tank is always dry.

The pad around the tank is covered with

Geo Cloth, a heavy-duty drainage fabric, and topped with a layer of stone.

“It reduces the amount of gravel you have to use and stabilizes the pad,” Baumgardner says.

The tank and pad turned out great for Baumgardner’s pasture paddocks. Despite last year’s drought, 34 cows did very well on 30 acres of pasture. Because of some issues with reliable gravity flow, he plans to install a wind-powered air compressor to power a water pump. To accommodate calves, he will add gravel to raise the area around the tank to make it easier for them to drink.

Contact: FARM SHOW Followup, Gene Baumgardner, 4042 Carr’s Mill-Jamestown Rd., Jeffersonville, Ohio 43128 (ph 614 316-4000).



The 4-ft. dia. concrete culvert has a floor made of Quikcrete and is fed by an artesian well.

## Electric Mower “Runs All Day”

This new walk-behind electric mower seems to run all day on its powerful battery pack, or lithium energy module (LEM). At least, that’s what customers tell Joe Conrad at Mean Green Products, LLC. He knows they’re exaggerating, but he also knows why they say it.

“The WBX-33 with the LEM80 lithium module is designed to run for more than 4 hrs.,” says Conrad. “People think it runs longer because they are going from job to job, and it just keeps going without running out of power. If you want it to really run all day, just get a second battery pack. It slides right in when the first one wears down.”

It isn’t just the power pack that Conrad’s customers like. The 33-in. wide mower can mow from 2 to 4 acres, depending on the size LEM it has.

It has a top speed of 5 mph forward and 2 1/2 mph in reverse, with fingertip speed control. Auto-shutdown of mowing blades before the LEM is depleted ensures adequate power to return to a charging area or to swap out the depleted LEM for a fully charged unit. The LEM’s used by Mean Green Products last for about 1,500 charging cycles, or 10 to 15 years.

The WBX-33 peaks out at 16 hp and has a list price of \$4,100 with three LEM options. The LEM40 will power the mower for more than 2 hrs. and is priced at \$995. The LEM50 is priced at \$1,500 and will power the mower for 3 hrs. The powerful LEM80 with its 4-hr. run time is priced at \$1,995. A charger for the LEM battery pack is priced at \$475.

“Regardless of the size LEM on it, the WBX-33 will blow away other electric



Walk-behind, 33-in. wide electric mower runs on a lithium energy module power pack.

mowers,” says Conrad. “It has as much or more power than a gas engine with the same horsepower. At its commercial cutting speed, it throws grass 10 ft. out of the chute.”

Residential mowers normally run with a tip speed of 13,000 to 14,000 fpm (feet per minute). The WBX-33 has two operating modes. When the grass is lighter, reducing the tip speed to 16,200 fpm can extend running time by 25 percent. If the grass is heavy, the tip speed can be increased to about 17,800 fpm for a normal run time.

Contact: FARM SHOW Followup, Mean Green Products, LLC, P.O. Box 317, Okeana, Ohio 45053 (ph 513 200-7561; [www.meangreenproducts.com](http://www.meangreenproducts.com)).



Windows and sliding doors of all shapes and sizes were built into the walls of this greenhouse, put up by Jim and Lois Blansit.

## “Hot House” Made From Windows

By Klaire Bruce

Jim and Lois Blansit, of Walnut Shade, Mo., love having fresh greens all year long but cold Missouri weather makes winters tough.

They decided to build a greenhouse out of old windows. The walk-in greenhouse is situated on a terraced hillside. The greenhouse itself is 12 by 20 ft., with the back 9-ft. height sloping to 7 1/2 ft. at the front. The walls were framed with 2 by 4’s. The roof consists of 26-in. translucent acrylic corrugated panels attached to 2 by 6 rafters. The entire frame of the greenhouse is treated lumber. Windows and sliding doors of all shapes and sizes were built into the walls.

Inside the greenhouse, there’s an in-ground planting bed as well as a planting shelf that sits atop a row of 55-gal. plastic drums, painted black and filled with water. The water warms up during the day and gradually releases the heat into the greenhouse at night, creating a moist, warm environment – perfect for growing fresh vegetables.



Inside the greenhouse there’s an in-ground planting bed as well as a planting shelf.

Contact: FARM SHOW Followup, Jim and Lois Blansit, 1544 Keithley Rd., Walnut Shade, Mo. 65771 ([jamesr78@centurylink.net](mailto:jamesr78@centurylink.net)).