"Air Blower" Applicator Knifes Dry Fertilizer Into Ridges

Tom Belton, Indianola, Ill., mounted a steel hopper on the frame of a junked-out, pull-type dry fertilizer spreader to come up with an 8-row "air blower" applicator that knifes in dry fertilizer.

"It lets me band starter fertilizer onto ridges before planting to give plants a quick start," says Belton.

The hopper mounts crosswise so the conveyor chain in the bottom runs across air hose outlets he installed in the bottom of the hopper. A pto-driven blower on front of the tank delivers the fertilizer to cyclone cannisters mounted on a Hiniker cultivator toolbar that hitches to the back of the spreader. Fertilizer is knifed in 3 to 4 in. deep on top of the ridges behind Yetter coulters mounted on the toolbar.

A ground-driven wheel chain-drives a pulley that belt-drives the conveyor chain in the hopper, which carries 3 tons of fertilizer. "It works as well as commercial 'air blower' dry fertilizer banders with fiberglass hoppers that cost as much as \$30,000, but I spent less than \$1,000 to build it. I think the same idea could be used to striptill fertilizer.

"I had been broadcasting dry fertilizer in the fall and working it into the ground while planting and cultivating. However, knifing the fertilizer in helps get corn off to a quicker start. I use a 170 hp Deere 4-WD tractor to pull it, but a 100 hp tractor would be adequate. I prefer to use it during the fall in order to save time, but last year I used it mostly during the spring.

"I got the fertilizer spreader free from a local fertilizer dealer. I spread the wheels out on 120-in, centers to span four 30-in. rows. The pto-driven gearbox that originally powered the spinners now drives the blower. There's one outlet at the bottom of the hopper for each two rows, and I can



vary the application rate by changing gears on the hopper conveyor chain. The cyclones reduce air pressure created by the fan so fertilizer falls evenly by gravity to the ground.

"The toolbar is raised or lowered by lift assist wheels salvaged from an 8-row planter that I already had. The hydraulic cylinders on both the lift assist wheels and ground-driven wheel are plumbed together so that they all raise or lower at the same time."

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Army 6-WD Truck Makes Dandy Manure Handler

When Young Farms, Caneyville, Kent., started looking for a better way to handle their liquid manure, they considered several different options.

"We looked at pumping it right out to fields through an irrigation system, but we couldn't because of our hilly terrain. Another option was to build a tractor-pulled tank but the hilly terrain would have limited us to a small tank. It would be difficult to stop a large tank with a tractor on hilly ground," says Randy Young.

"We finally hit on the idea of using an army surplus truck and discovered it has some features that make it ideal for this type of job.

"A friend located a 5-ton 6-WD truck for us and we fitted it with a 3,100 gal. Balzer vacuum tank. Operation of the rig is very simple. All vacuum tank controls are in the cab except for the lever to change from vacuum to pressure, which is on the pump. Army trucks have several pto options so we were able to run the pump off a jackshaft that originally powered a winch. The truck also had air-overhydraulic brakes. We were able to tap into the air system and run all valves and actuators with air cylinders, eliminating the need to install a 'wet kit'.

"As far as we're concerned, there's no other vehicle that would work as well for this job. It maneuvers easily on even the roughest terrain, generally unloading in about 15 min. It works so well, we've had many offers to do custom spreading in our community which has proven to be



a lucrative business for us. We've also received orders to build army truck spreaders and have so far built two of them besides our own."

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Heavy-Built Grain Hauling Rigs By Bonnie Heidtke

Farming over 3,000 acres on farms scattered over a wide area means a lot of road travel during harvest. That's one reason Bob Bunne decided to put together his own heavy-duty running gears for two 500 bu. grain carts.

Bunne mounted 10-ft. wide commercial grain boxes on truck frames. When fashioning hitches for the truck frames, he came up with a pintle hitch design that he can hitch and unhitch from the seat of a tractor.

One reason Bunne wanted heavier running gears on the big wagons was that he wanted to pull both wagons together behind a 2-WD tractor. He needed more stability under the wagons in order to handle that much weight with a smaller tractor.

Bunne first bought new J&M grain boxes from a local dealer, and then fitted them to heavy-duty truck frames he picked up inexpensively. Since the wagon boxes were 10 ft. wide and the truck axles only 8 ft., he had to widen out the axles using pieces of I-beam. "The extra 2 ft. adds lots more stability on the road," Bunne notes.

The wagons are fitted with dual wheels



fitted with inexpensive truck tires. Bunne narrowed up the front end of the truck frame so it comes to a point with a pintle hitch.

An automatic hitch mounts on the tractor 3-pt. Bunne slips a hook on the hitch under the pintle hook on the grain wagons, them uses a rope to drop down the locking hook that goes over the top. Lets him hook and unhook from the seat of the tractor.

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Hand-Held Wire Unroller

"My simple homemade wire roller makes putting up and taking down temporary fence easy. You can use it with any kind of smooth wire," says Ricky Parnell, Edmonton, Kent.

"It'll hold four small spools or two large ones. You can unroll wire with one hand and put the wire into the insulators with the other. To roll up wire, you crank by hand with a handle that fastens to the outer edge of he spool. Works like a big fishing reel.

"I've used this roller for about two years. Works great."

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