

## He Knifes In Liquid Fertilizer Behind ATV

Fred Moore grows only about 1/4 acre of sweet corn on his small acreage, yet he knifes in liquid fertilizer just like bigger farmers do. He uses a home-built, single knife applicator that he pulls behind his 4-WD Polaris Sportsman ATV.

"It lets me apply fertilizer exactly where it does the most good. I tried it for the first time last spring, and my sweet corn has never looked better," says Moore.

He bought the applicator knife at Tractor Supply Co. and bolted it onto one side of a frame made from steel tubing. The frame bolts onto the ATV's hitch.

Fertilizer is stored in a 25-gal. tank mounted on back of the ATV. An electric pump feeds a plastic tube that runs down behind the knife. The fertilizer is injected about 17 in. from the row and directly behind the ATV's left rear wheel. A spring-release lever off an old drag section is used to raise and lower the knife.

"I was surprised at how well it works. The 4-wheeler really pulls it nice," says Moore. "Three days after I applied the fertilizer the corn really started growing, and when I harvested it, I think it actually tasted a little sweeter. I also used the knife on some pumpkins. The only limitation is that I can't use it when the corn is more than 8 in. tall or the ATV will knock the plants over."

Moore says he had been broadcasting dry fertilizer in the spring before he planted. However, he says liquid fertilizer is cheaper and he can apply it where it does the most good. "I run the knife about six inches deep and apply fertilizer at a rate of 55 gallons per acre. I already had the ATV-mounted tank and pump, which I had been using with a boom to spray herbicides. I can still put the boom back on to spray herbicides."

To get the knife to penetrate the ground,



**Fred Moore knifes in liquid fertilizer with a single knife applicator that he pulls behind his 4-WD ATV.**

he has to set it down and then back up onto it, and then drive forward. "Even though there's no hydraulic downpressure it hasn't been a problem," says Moore.

As for the cost, "I paid \$15 for the knife.

I already had the tank and pump. My total cost was less than \$100."

Contact: FARM SHOW Followup, Fred Moore, 814 Cove Road, Wales, Michigan 48027 (ph 810 392-7207).

## "Cornstalk Special" Newest Baler On The Market

After he started custom baling corn stalks in 1995, Eric Woodford started looking for a better way to pick up the bulky crop material. He came up with a power-driven rotor - called a windguard - that helps feed residue into a baler. It worked so well, Vermeer Corporation licensed the patented invention from him.

This fall Woodford and his crew will operate four new Vermeer 605 Super M Cornstalk Special balers - based on the prototype Woodford presented to Vermeer two years ago.

"Cornstalks have a different texture and consistency," Woodford says. "They don't bind together in a windrow like hay. They tend to tumble in front of the pickup."

His hydraulically-driven powered rotor mounts above the pickup assembly and kicks the stalks up. Star-shaped plates that mount onto a hex shaft feed high volumes of corn stalks into the baler. The power rotor reverses if material starts to plug.

With the Cornstalk Special, operators won't have a lot of plugging as they did with older balers, Woodford says. And they will be pleased at how much faster they can bale residue. The Redwood Falls, Minn., farmer said he went to Vermeer because baling cornstalks requires heavy-duty equipment and Vermeer builds that type of equipment.

Vermeer's new baler comes with two windguard rotors - one for corn stalks and one for hay. Operators can remove and exchange the units in less than half an hour. The new corn stalk rotor doesn't work on older Super M balers.

"The timing was perfect for this baler," says Dan Belzer, advertising manager for Vermeer. "We've seen an increase in corn stalk baling. Eric had a fantastic solution. As a producer he knows what's needed in the field."

When Woodford started custom-baling cornstalks they were primarily used for bedding, but many farmers now mix them



**Power-driven rotor helps feed bulky crop residue into baler with minimal plugging.**

with ethanol byproducts for livestock feed.

With so much interest in renewable energy, Woodford believes the baler could play an important role in the cellulose ethanol industry.

The Cornstalk Special sells for \$53,655.

Contact: FARM SHOW Followup, Vermeer Corporation, P.O. Box 200, Pella, Iowa 50219 (ph 800 370-3659; www.vermeer-ag.com).

## Wheelchair Lift Converted To Front-End Loader

Tom Chaney, Chrisman, Ill., converted an electric-operated wheelchair lift - designed for a school van - into a quick-tach front-end loader for his Deere 214 garden tractor.

The bucket measures 5 ft. wide and handles loads up to 500 lbs. It can reach up to 6 ft. high.

"I built it after I started raising chickens and needed a small loader to handle manure and move gravel. It works great and cost less than \$500 to build," says Chaney.

He got the electric-operated wheelchair lift from the local school where he works as a mechanic on school buses. The lift was originally equipped with two metal arms and a 30-in. wide metal deck, which lifted wheelchairs into a van. It was operated by remote control. An electric-operated, screw-type cylinder was used to raise and lower the deck and was operated by a motor inside a metal box attached to the deck.

He cut the deck in half and welded in new material to widen the deck to 40 in., allow-

ing him to drive the garden tractor over the deck to hook up to it. He cut the arms and mounted them backward to look like real loader arms. He bought a 5-ft. wide loader bucket from a Massey Ferguson dealer for \$150 and welded it onto the arms.

He attached a homemade mounting bracket to the top of the wheelchair lift's deck. Three 5/8-in. dia. hitch pins are used to attach the loader to the garden tractor - two for the loader arms and one for the deck. A metal rod extends from the mounting bracket to the back of the garden tractor. "As a result the loader is always driving from the tractor's hitch," says Chaney.

He mounted the wheelchair lift's remote control box on a pedestal within easy reach of his right hand and wired it to the tractor's battery.

He uses a trip lever to trip the bucket. "The screw-type cylinder wasn't built strong enough to handle the pressure of the bucket going up and down, so I removed it and in-



**Electric-operated wheelchair lift - designed for a school van - was converted into a quick-tach front-end loader. Inventor Tom Chaney uses it on his Deere garden tractor.**

stalled the trip lever. I plan to install a heavy duty hydraulic cylinder so I can raise and lower the bucket hydraulically," says Chaney.

"The wheelchair is rated at 1,000 lbs. but I rarely lift more than 500 to 600 lbs. Commercial loaders are available for this tractor but they sell for \$4,000 or more.

"The metal box that contains the hydraulics also contains a hand pump, so if the trac-

tor battery ever loses power I can use it.

"The load on front can cause the tractor's rear wheels to spin, so I bolted a pair of 50-lb. front-end weights for a Deere 4010 tractor on back," notes Chaney.

Contact: FARM SHOW Followup, Tom Chaney, Sr., 14732 E. 1800<sup>th</sup> Rd., Chrisman, Ill. 61924 (ph 217 269-3507; tomchansr@yahoo.com).