

# Farm-Based Businesses Help Boost Incomes

## Center Pivot “Rut Filler”

When Brian Hoffner, Gill, Colorado, needed to fill ruts left by the center pivot irrigation system in a hay field three years ago, he figured he could save time and money by making a cart to do the job.

Hoffner bought an old road sand and salt spreading trailer from a local state highway maintenance department and went to work. The trailer, which holds about 10 tons of material, has a 16-in. wide conveyor in the bottom to drop material onto the fan. The sides slope in to the conveyor, so it empties out completely.

“It wasn’t that difficult to convert it to fill ruts,” he says. “It had its own engine to power a self-contained hydraulic system. Since I was going to use it behind a tractor, I took off the engine and hydraulic system and added hoses to couple it to the tractor.”

He stripped off the spreader fan and then turned the box around on the trailer so he

could see the opening from the tractor seat. Then he added a 2-ft. long flange on each side of the drop opening. “The flanges direct material into the tracks. I made them adjustable, so I can open or close them to fill narrow or wide tracks,” Hoffner says.

“I hadn’t seen anything like this before, but I knew it would work,” he says. “After I used it to fill ruts in my fields, neighbors started asking if I’d fill ruts for them.

“It’s become a small sideline business for me. I can use whatever material people want, from gravel to sand or soil,” he says. “Gravel allows better drainage away from the wheel track, so ruts aren’t as likely to form. I’ve found that if ruts are deep, I can fill them about two-thirds full with gravel and then the field can be tilled without disturbing the gravel base.

“Typically on half a sprinkler, it takes about 500 tons of material.” That works out to a little more than 3 tons per acre, which means



Wagon fills deep ruts with anything from crushed rock to soil. Material flows out of a hydraulically-operated door at bottom center.

a 10-ton load will cover about 3 acres, depending, of course, on the depth of the ruts.

Hoffner charges \$30 per 10-ton load to fill ruts, so at 3 acres per load, that comes out to about \$10 per acre. The cost of the fill is not included.

He says the best time to fill is in the winter when the ground is frozen.

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Trailer is used to prepare animals for butchering and then bring them back to a meat locker plant. Overhead trolley beam drops down for transport.

## “Lift-All” For Slaughtered Animals

Norm Waters and Alvin Nicolay, Innisfail, Alberta, recently sent FARM SHOW photos of a mobile animal butchering rig they built for Frank Hengstler, who has a custom slaughtering business traveling from farm to farm. The trailer is used to prepare animals for butchering and then bring them back to a meat locker plant.

The 16-ft. long trailer is equipped with an overhead trolley beam that can be raised to a height of 14 ft. A pair of independently-operated, remote control winches roll back and forth on the beam. A 9-ft. long stainless steel tub mounts on the trailer floor.

The animal is killed and cut in half. Then the winches are used to lift the two halves of the carcass into the tub for transport back to a locker plant. The frame folds down to a transport height of 7 ft.

There are a pair of toolboxes on front of the trailer. One toolbox contains a small generator that’s used to operate a sawzall that’s used to butcher animals. The other toolbox contains a 12-volt battery connected to an electric/hydraulic power pack that’s used to operate the winches and cylinder.

According to Waters, new regulations in Alberta prohibit leaving the hide on the animal during transport back to the locker plant, and require that a skinned animal has to be transported in a stainless steel tank.

“The trolley beam has a 6-ft. overhang

Animal is killed and cut in half. Then winches are used to lift the two halves of the carcass into a 9-ft. long stainless steel tub mounted on trailer floor.



on back so you can work on an animal at a convenient height. Once the animal is lifted off the ground it never touches the ground again,” says Waters. “One man can do all the work himself without any other equipment.”

The trailer can be custom built for about \$20,000 (Canadian).

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Robert Rogers, Piedmont, Alabama, built this 27-ft. long, fifth wheel “push trailer”. It allows one man to quickly load small square bales into cargo vans and semi trailers.

## “Push Trailer” Makes Bale-Selling More Profitable

Robert Rogers, Piedmont, Alabama, recently called FARM SHOW to tell us about the 53-ft. long, fifth wheel “push trailer” he built that allows him to load small square bales into cargo vans and semi trailers.

Rogers is a commercial hay producer who sells 50,000 to 75,000 small square bales of hay and wheat straw each year. He loads the bales into semi trailers and delivers them to farm supply stores. The stores sell the bales off the trailers.

“Loading the trailers was very labor intensive and took two or three men several hours to load each one,” says Rogers. “My push trailer lets me load 630 bales in a 53-ft. trailer in less than an hour - all by myself.”

To make the “push trailer”, Rogers cut the back end, top and one side off a 27-ft. van trailer, leaving a 4-ft. high wall on the open side. He uses a skid loader and a Steffen 15-bale grapple fork to load bales over the side of the push trailer. Once the bales are stacked 7 layers high (105 bales), a hydraulic-operated pusher plate moves the bales forward into another van. A 53-ft. trailer holds six full groups of bales and part of another one for a total of 700 bales.



He uses a skid loader and a Steffen 15-bale grapple fork to load bales over side of trailer.

Rogers says he’s willing to build push trailers for about \$15,000, not including the cost of the Steffen equipment used to push the bales back and forth. Rogers is a Steffen dealer.

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