Bolt-on, bale-holding frame replaces the grain box on Matt Abbas's old Ford F-600 2-ton truck. It can haul 6 round cornstalk bales at a time.

Abbas uses the truck's hoist to slide bales off the back end of frame.

Removable Truck-Mounted Round Bale Hauler

Matt Abbas, Latimer, Iowa, couldn't justify the cost of a pull-type bale hauler to haul round corn stalk bales for use on his cow-calf operation. He already had an old Ford F-600 2-ton truck equipped with a hoist and grain box, so he built a bolt-on, bale-holding frame that replaces the grain box and can haul 6 bales at a time.

"It's less expensive than a side dump hay trailer and lets me go down the road at highway speeds. It was relatively easy to build," says Abba. "I use a loader tractor to load bales onto the truck, but I don't need a tractor to unload them. I just go down the road, back up to the stack, and slide the bales off the back end of the truck. I use a loader tractor with pallet forks to both install and remove the frame. The same loader tractor is used to remove the frame and re-install the grain box. It requires removing just 4 bolts."

The frame measures 16 ft. long and is made from 2 by 6 channel iron, with 2 cradle-shaped beds on each side. It bolts onto metal brackets beside the truck's stake pockets.

The frame extends a couple feet out the back end of the truck. "The truck bed is 14 ft. long, but with 5-ft. bales we had to build a longer frame in order to make room for 6 bales," says Abbas. "An 18-ft. truck bed would probably work even better, because you could build a 20-ft. frame that would hold 8 bales. One problem with my 16-ft. frame is that the bales fall some distance to the ground, and if I don't unload them just right they can flip over. That wouldn't happen with a 20-ft. frame because the bales would be a little closer to the ground."

He built the bale hauler last fall right after he was done combining corn and spent about $1,200 for the metal and welding work. "You could probably save money by building the frame out of pipe instead of channel iron," says Abbas, who notes that old used straight trucks can often be purchased at farm sales at low cost.

Contact: FARM SHOW Followup, Matt Abbas, 635 130th St., Latimer, Iowa 50452 (ph 515 290-6123; massey1100@yahoo.com).

Box Scraper Fitted With Transport Wheels

Doug Creswell recently bought a Brinly tow-behind box scraper designed to be pulled behind a riding mower. "It works great on my crushed rock driveway. But it didn't have wheels and couldn't be transported from my barn to a work site without scraping along the way," he says."I contacted the company to ask if they offered a wheel attachment kit to solve the problem. They said 'no' and didn't seem interested in pursuing the matter. So I designed and made my own. It works great. My bet is that others who have bought a scraper like mine would like to know how to add wheels."

He added a pair of 6-in. rubber wheels to each side of the scraper, mounting them on a 1/4-in. thick steel bar made by cutting a 3-pt. hitch stabilizer bar down to about a 10-in. length. Each bar is fastened to the scraper by a double-nutted bolt that runs through a hole drilled into the scraper. Creswell drilled 2 more holes a few inches apart, one above the other, at the back of the scraper and also drilled a corresponding hole in each bar. A bolt can be inserted through either hole in order to change the position of the wheel.

"I run a bolt through the top hole to put the scraper on the ground, and through the bottom hole to lift the box off the ground for transport," says Creswell, who adds that he has a diagram of the modification and would be happy to email it to anyone who's interested.

Contact: FARM SHOW Followup, Doug Creswell, 16401 Camalo Dr., Mount Airy, Md. 21771 (ph 410 489-5832; doug.creswell@gmail.com).

Doug Creswell wanted to transport his tow-behind box scraper from his barn to a work site without scraping along the way, so he added a pair of 6-in. rubber wheels on back.

Perennial "Wheat" Farm-Tested In 2015

"Two northern Minnesota farmers and myself are part of this project, testing the first commercially grown perennial wheatgrass," says Richard Magnusson of Roseau, Minn. "It's called Kernza and yields are inching up each year. The crop can also provide plenty of forage for spring and fall grazing."

Dr. Don Wyse, an agronomist at the University of Minnesota, thinks Kernza wheatgrass will yield more than annual wheat within a few years. "We already have a line that yields 40 percent of spring wheat when grown in wide row spacings," he says.

A big advantage of perennial wheat over annual wheat, according to Wyse, is its root system. Kernza roots are dense and can grow to depths of 10 ft., helping survive droughts.

Lee DeHaan at the Land Institute in Kansas, a partner in the breeding program, says there's still a lot to be learned about Kernza. One of the big challenges, he says, is stem strength. The crop grows more like grass than grain and produces a thick stand that tends to lodge. Hence, researchers are studying a variety of row spacings – up to 36 in. - to see if wider rows will produce thicker stems that will stand better.

Research at the University of Minnesota, the other partner in the project, has also identified a dwarf strain of Kernza that may lodge less, but yields from the dwarf plants so far are not equal with the non-dwarf plants.

Carmen Fernholz of Madison, Minn. is growing Kernza as part of the testing program and says the crop is ideal for northern Minnesota, where spring flooding can often force delays in spring seeding. "A lot of years, it's hard to get the crop in the ground, so a perennial wheat crop makes a lot of sense, both for grain production and for fall grazing by cattle." Wyse adds that Kernza can be grazed much like cattle producers graze winter wheat in the Plains states. "The crop can grow to 5 ft. tall, so it definitely produces a lot of biomass."

Dr. Don Wyse of the University of Minnesota inspects a seed head of Kernza, a perennial wheat the University is helping develop along with The Land Institute in Kansas.

The future of Kernza will depend much on how the grain is adopted by the food industry and consumers, according to Wyse. "I've eaten pancakes, muffins and sourdough bread made from Kernza, and they've tasted fine," he says. "My guess is that a 50/50 mix of Kernza and wheat flour will become a popular product for baking bread, cookies, cakes, muffins, and so on."

Kernza is a registered trademark of The Land Institute.

Contact: FARM SHOW Followup, Donald Wyse, Dept. of Agronomy and Plant Genetics, University of Minnesota, 411 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, Minn. 55108 (ph 612 625-7064; wysex001@umn.edu).