



"I already had the combine and spent about \$15,000 to modify it. A new sprayer of this type would have cost \$100,000 or more," says Arlin Penner.

## Narrow-Wheeled Sprayer Built Out Of Old Combine

Manitoba farmer Arlin Penner couldn't justify the cost of a new self-propelled sprayer. So he did what a lot of other farmers have done in recent years. He converted a 1974 New Holland 1400 combine into a high-wheeled sprayer.

"I use it mostly to do in-crop spraying in wheat and barley. I already had the combine and spent about \$15,000 to modify it. A new sprayer of this type would have cost \$100,000 or more," notes Penner.

He removed the feederhouse and mounted a 90-ft. boom on front. He also removed the cylinder, concaves, and straw walkers to install a 1,000-gal. tank on back that he made out of stainless steel. "I tried to find a commercial tank that would fit in there but I couldn't so I made my own," says Penner. The sprayer pump runs off the thresher clutch.

He removed the original tires and replaced

them with narrow 12.4 by 46 ones on front (off a Ro-Gator) and 11.2 by 28 ones on back.

"I use it during the fall to spray pre-harvest Roundup on wheat and barley. The tall, narrow tires are easy on the crop," says Penner. "It doesn't have 4-WD so if it's really muddy it doesn't work the best, but otherwise it does everything I need it to. I had been using a pull-type sprayer and sometimes hiring someone to come out, but I couldn't always depend on them to come out when I needed them. At first I used a 90-ft. boom, but then I bought a 40-ft. air seeder and went to tramlines, so I cut the boom down to 80 ft.," says Penner, who adds that he also bolted a plastic skid plate under the combine to deflect grain.

Contact: FARM SHOW Followup, Arlin Penner, Box 89, Elma, Manitoba, Canada R0E 0Z0 (ph 204 348-2968).



Penner removed feederhouse and mounted a 90-ft. boom on front. He also removed the cylinder, concaves and straw walkers to make room for a home-made spray tank. Thresher clutch powers sprayer pump.

## Back-Saving Lift Harness

The HappyBack harness is a lightweight frame worn around the back and torso and strapped to the legs. It's made with a pair of fiberglass rods that bend as you bend. The rods transfer pressure from the weak lower-back muscles to the strong leg and buttock muscles.

"As you bend over, the rods tend to bring you back to an upright position, overcoming the force of gravity on your upper body," says inventor Bruce Roberts.

The device is made from a breathable neoprene material and consists of a chest harness, belt, and leg straps, all equipped with Velcro straps. Adjustable bungee cords extend from the top of each rod to hooks on back of the chest harness. By pushing down on a release button you can adjust the cords to the height you want to work at.

"You can't appreciate how well it works until you strap it on and feel how it takes the pressure off your lower back. When you bend over 90 degrees, it's almost like you're hanging there from a big sky hook," says Roberts. "It works great for picking strawberries, cucumbers, or just about any kind of produce.



Fiberglass rods attach to chest harness and leg straps, providing lift that supports back.

It takes less than 30 seconds to put on and less than 10 seconds to take off," he notes.

Sells for \$380 plus S&H.

Contact: FARM SHOW Followup, Ergo Ag Co., P.O. Box 1087, Aptos, Calif. 95001 (ph 831 688-6951; email: bruce.roberts@sbcglobal.net; website: www.ergoag.com).



Riding on wheels, flagger consists of an upright sign that says "stop" on one side and "slow" on the other, with a flashing light above. A hand-held controller connects to flagger by an electric cord.

## Remote-Controlled Highway Flagger

After almost getting killed by a car while working as a highway flag man, Richard Heinz, Rushville, Ill., lay in the ditch thinking: "There's got to be a better way."

He soon came up with an idea for a remote-controlled flagger and spent the next 10 years working on it. He eventually took it to the Illinois Department of Transportation. The department liked it and, after testing a prototype unit, recently ordered 20 of the robot flaggers for more extensive test-

ing across the state.

Riding on wheels, the flagger consists of an upright sign with a flashing light above. The paddle-type sign says "Slow" on one side and "Stop" on the other. A hand-held controller connects to the flagger by an electric cord.

Contact: FARM SHOW Followup, Endless Visions, Inc., 124 McAullister, Rushville, Ill. 62681 (ph 217 322-3757).



Telescoping hitch attaches to a metal bracket bolted to front of ATV. It folds out of the way when not in use.

## Hitch Makes It Easy To Tow ATV

Alan Brule, Crookston, Minn., made a hitch to tow his 4-wheel ATV behind his tractor, pickup, grain drill, field cultivator, and other equipment.

The hitch is made from telescoping tubing. One end of the hitch attaches to a metal bracket that bolts to the front part of the ATV frame. A hitch pin goes through the hitch as well as the bracket and is secured by a cotter pin. The other end of the tubing is pinned to a clevis that attaches to the implement.

"It's a simple idea but it really comes in handy," says Brule. "I'm usually alone in my fields which are scattered out, so I use it all

the time. I've even pulled it behind my pickup at speeds up to 55 mph. When I get to the field I drop off the equipment and ride the ATV back home to get whatever else I need. The hitch detaches in just a few seconds. I bought about \$40 worth of steel to put it together. I pull my drill lengthwise down the road. The markers on my grain drill stick out kind of far, but the hitch on the ATV telescopes so there's plenty of clearance."

Contact: FARM SHOW Followup, Alan Brule, 19457 260<sup>th</sup> St. S.W., Crookston, Minn. 56716 (ph 218 281-7456).

## Solid-Seeded Silage Production

Solid-seeded corn appears to yield more silage of quality equivalent to corn planted in conventional 30-in. rows. A solid seeding demonstration is now in its second year at the Prairie Agricultural Machinery Institute (PAMI), Portage la Prairie, Manitoba.

"Roundup Ready corn is the key reason we can try it," says Harvey Chorney, vice president, PAMI. "It lets us do weed control between the plants. If you just solid-seed corn with no way to control weeds, it's not a viable option."

Chorney notes that Monsanto provided the chemical and the seed and a local implement dealer provided a Bourgault air seeder. A Claas self-propelled chopper was used last year and will be used again this fall. The co-sponsors could all see increased sales if the demonstration results continue to be positive.

In 2003, the demonstration looked at two plots. The conventional plot consisted of 30-in. rows, while the air-seeded plot had random plant emergence. Both plots were planted at 28,000 seeds per acre with the same hybrid.

This year, the conventional plot remained the same, but three seeding rates were tried with the air seeder: 28,000, 30,000 and 32,000 seeds per acre.

"We had a rough spring, so getting in the field was tough," says Chorney. "We had hoped to do a field cultivation, but it was too wet. It was just dry enough to get in and plant, which we did. A couple weeks later, as the corn was starting to emerge, we made a single pass with Roundup."

Chorney is aware of several farmers in Manitoba who have been solid seeding corn for years. Until now, there have been no direct comparisons from which to gather hard data. Chorney hopes these demonstrations will fill that gap.

"The next question will be what happens to grain corn if it is air-seeded," says Chorney.

Contact: FARM SHOW Followup, Harvey Chorney, PAMI, Box 1060, 390 River Road, Portage la Prairie, Manitoba, Canada R1N 3C5 (ph 204 239-5445; email: portage@pami.ca; website: www.pami.ca).