Press Wheel Closers Key To Interseeding Success

Keith Hartmann is confident the closing wheels on his dual-purpose interseeder make the difference for his cover crops. After trying rolling baskets that came with his Yetter Strip Fresheners, he came up with his own press wheel design.

"I built a 3-row prototype interseeder and used it last summer," says Hartmann. "I found that the Yetter rolling baskets crumbled the soil, and the cover crop seed got too deep. My press wheels firmed up seed-soil contact."

Hartmann likes the Yetter units with their sharks-tooth wheels for their ability to do shallow tillage in early spring, loosening and drying up the soil surface.

This year he went from his 3-row prototype to a 12-row toolbar with a Great Plains NP4000 fertilizer applicator and a Gandy Orbit air seeder. He also mounted 12 of the Yetter Strip Fresheners on the Great Plains toolbar. "The Yetter units are longer than anticipated and don't fit in front of the toolbar's assist wheels," notes Hartmann. "Next year they may be on their own toolbar."

What won't change are the press wheel units that Hartmann designed to replace the rolling baskets. Clevis-type brackets pivot vertically from the rear of the strip freshener. The Gandy seed delivery tubes are held in place by the brackets. Cover crop seed is directed down and forward to land between the sharks-tooth wheels.

"The sharks-tooth wheels throw a light layer of soil, perhaps a quarter to half an inch, over the seed just ahead of the press wheels," says Hartmann.

Hartmann is so enthused about the press wheels that he is now making them to sell. He is finalizing pricing on the 3/8-in. steel and the 16-in. diameter, 7 1/2-in. wide wheels. He expects them to come in between \$350 and \$375.

"People who have the Yetter Strip Fresheners for their strip-till program can use them for cover crops too," says Hartmann. "Where I did interseeding last year, the cover crops came through great. They held nutrients in place and improved soil texture and health. This year I no-till planted soybeans into the strips, and they emerged in only 3 days."

Hartman credits funding for his prototype unit to the Minnesota Department of Agriculture's (MDA) Sustainable Ag Demonstration Grant, MDA's Nutrient Management Initiative, MN Corn Growers' Innovation Grant and the NRCS EQUIP program.

"These organizations have been very supportive," says Hartmann.

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After trying rolling baskets on his interseeder, Keith Hartmann replaced them with his own press wheel design that results in better seed-to-soil contact.

"Made It Myself" Mower Ideal For CRP Acres

Gerald Gould's 20-ft. mower is a low-cost way to cut his 25 acres of CRP land. He didn't want the expense of a large rotary mower, nor did he want to run his tractor at the high rpm's needed for one. However, he needed to cover rough ground and wanted to be able to vary the cutting height.

"With this mower, the tractor runs at about 1,200 rpm's," says Gould. "It rolls over the ground and swings behind for towing."

Gould designed the mower around a 20-ft. sickle bar and wobble box salvaged from an old combine. He made a frame to mount the mower to the 3-pt. hitch from 6-in. wide, 5/8-in. thick steel.

Telescoping members and a frame within the frame allow the mower to swing from cutting position to transit position with a single pin locking it in either mode.

"If I pull the pin and drive ahead, it swings into transit mode," says Gould. "To swing it back into cutting position, I pull the pin and back up. The mower swings around until I can pin it again."

He used a gearbox off an old Bushhog to power the sickle bar. A universal joint on the gearbox accommodates the movement between transit and cutting positions.

He reinforced the bar with pipe and added

crazy wheels at 8 and 12 ft. along the bar. "I used a tail wheel from a little Bushhog mower and one from a wheelbarrow and made the crazy-wheel mount," says Gould. "Each crazy wheel has a hydraulic cylinder on it, so I can raise the bar from a 6 to 18-in. cutting height."

Gould ran hydraulic hose through the reinforcing pipe to the cylinders. Pressure in the line is equalized, so if one wheel drops and the other goes up, the bar stays level across its length.

The gearbox shaft also powers a homemade reel that Gould added after the fact.

"When I first took it to the field, if I hit a bare spot or one that had grown up in weeds, the cut material would just lay on the bar," says Gould. "I needed beaters for it."

He fabricated a reel from 1 1/2-in. thin-wall pipe mounted above the bar. Sections of 3-ft. long, 1 1/2-in wide scrap steel welded to the pipe serve as mounts for the beaters. Beaters are 3-ft. long sections of plastic barrel cut into slats. Each section is offset from the next.

"The beater reel moves up and down with the bar and is spaced so the beaters barely clear it," says Gould.

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Gerald Gould ouldn't justify the expense of a large rotary mower to cut his 25 acres of CRP land, so he built this 20-ft. sicklebar with a belt-driven reel.



The reel was made from 1 1/2-in. dia. pipe with batts cut from plastic barrels.

Donut Feeder Saves Hay, Cows

Once they've tried his "double donut" bale feeder, cattle producers appreciate several things about the design, says inventor Jim Hawken.

He built the first one about 33 years ago for a customer who wanted a feeder for two bales that would be safe. He was concerned about his cows getting their heads caught between the bars as bales broke down.

Hawken, who makes a variety of livestockrelated equipment at his Markdale, Ontario shop, says his feeder's hexagon frame is made of 1 1/4-in. square tubing and has a 20 to 25-year life expectancy.

Besides efficiency and safety, there's another unexpected benefit.

"There is virtually no hay waste compared to other feeders," Hawken says. "Hay drops on the inside ring of the feeder so it's not on the ground."

One customer, who feeds 200 cows with eight of the feeders, says he saves a bale of hay a day.



Taller inside ring holds 2 stacked bales at a time.

Loading is easy too, as the bales are dropped in the center. Feeders run \$1,350 plus delivery costs. Hawken says he will deliver the 750 lb. feeders to the East Coast of Canada and into the U.S. if there is interest. "I like getting out to see new people, and

it's a time for me and my wife to get away," he says.

Contact him for more information. And, if you need something bigger, ask Hawken about his triple feeder.



Donut feeder's double frame keeps cows from getting their heads caught between bars as bales break down.

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