



Drawings courtesy The FARMER

## **Odd-Row Equipment Cuts Wheel Traffic**

By Lon Tonneson

A five-row corn head and a 10-row planter help Ron Alverson get higher yields from ridge-till corn.

Alverson, Chester, S. Dak., switched from an even-row setup to solve two common ridge-till puzzles: How to get combine tires off ridges and how to reduce wheel traffic.

One of the first to use such a setup, Alverson modified a four-row combine and eight-row planter — plus his cultivator — for \$3,500.

He wanted to reduce wheel traffic—and the problems it causes when harvesting in four-row swaths and planting, cultivating and spraying eight rows at a time. Tractors and combines, often equipped with narrow duals that fit between ridges, ran on different tracks. Nearly every row was compacted—some on both sides.

The biggest problem was running on ridges. Tires on his four-row combine lined up almost on top of the outside ridges.

Alverson, who grows 750 acres of irrigated and dryland corn, checked compacted and uncompacted yields last year to find out for himself.

Uncompacted rows yielded 180 bu. per acre; compacted rows, 160.

"More than 40% of the field had less yield," he says.

The results aren't scientific, and may not apply to all situations, but they convinced Alverson to switch.

Alverson had an added incentive. He had been planting in 38-in. rows, but 30-in. rows yield 5-10% more in his area.

"I killed two birds with one stone by switching from an eight-row to a 10-row narrow-planting system extra yield potential and less loss due to compaction and field traffic. And the modification held down my equipment costs," Alverson says.

Converting the combine, planter and cultivator took about 40 hrs. No cutting or welding was needed. Tool-bar bolts were loosened and snouts, cultivator shanks and planter units were added and repositioned.

With eight - and four-row equipment, five of every eight rows were getting compacted; two on both sides (diagram A).

The tractor, pulling the planter, cultivator or sprayer, ran between rows three and four and five and six. The combine tires fit on the outside of row one and between rows four and five on one swath. On the next swath, the tires again hit rows four and five and the outside of row eight.

Since the modification (diagram B), tractor tires roll between rows four and five and six and seven. Combine tires fall between rows one and two and four and five on one swath; six and seven and nine and 10 on the next.

That reduces wheel traffic to four of the 10 rows and, more important to Alverson, no row has wheel traffic on both sides.

The ultimate in wheel traffic management would be a seven- or ninerow planting and harvesting system, says Dwayne Beck, South Dakota University research agronomist.

Beck directs the James Valley Research Center, Redfield, and is switching to a five-row harvesting and planting system next year.

In nine narrow rows, the tractor and combine, both set on 90-in. wheel tracks would run between rows three and four and six and seven

In a seven-row setup, the combine and tractor would run between rows two and three and five and six.

To achieve the same result in an eight-row system, the combine, planter and cultivator would have to be offset.

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Editor's Note: Have you got a "best idea" you'd like to share with FARM SHOW readers? It might be a new wrinkle in cropping, livestock, machinery or whatever. Maybe it's still experimental but looks promising. Or, maybe you've already proven it works. We'd like to hear about it. Write to: Best Ideas, c/o FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044.

## Farmers Mix Feed In Silo

Three Fall Creek, Wis., farmers have turned their silo into a feed mixer by filling the structure with a mix of corn silage and haylage at fall harvest.

Dale Wathke and his brother Myron, told FARM SHOW the idea works great if you have enough equipment and people to chop both corn and hay at the same time. They've done it for the past 8 years, mixing their third-cut alfalfa with an early maturing (80 to 85 days) corn variety in a 16 by 55-ft. concrete silo.

"If everything goes right the corn matures about Sept. 1 when the alfalfa is ready. We run two choppers and blow alternating loads of silage and haylage into the silo. The distributor mixes the two as they go in and again when the feed comes out," says Dale.

One of the biggest benefits of the mix is that it practically eliminates milk fever because the calcium content in the mix is lower than in straight haylage. "When we start to feed it, our milk fever problems go away." says Dale.

The mix also helps stretch their hay crop when hay may be in short supply. And by making haylage they avoid weather problems that might make it difficult to bale.

## Use Soap As A Deer Repellent

Deer can literally eat up a fruit grower's business. Countless methods have been tried to keep the animals away, but the newest one we've heard of is using a bar of soap tied around the tree.

Phil Wager, Red Creek, N.Y., has an orchard with apple, peach and cherry trees. "On young apple trees that we're training to take the proper shape, deer will chew off the terminal buds leaving the lateral buds. When this happens we get a bush instead of a tree."

Wager's extension agent Steve

Hoying told him about using soap as a deer repellent. They experimented for two years on various plots and then used it extensively this past year.

Wager drills holes through small, hotel-sized bars of Ivory soap and then uses string to hang the soap from trees. He places bars on trees around the perimeter of the orchard and on the end trees of each row. "We've had good results," says Wager. He notes that you don't have to use Ivory soap and that one small-sized bar lasts about one year.

## "Turned Around" Combine Wheels

"We turned the wheels around on our combine to have more room for maintenance," says Darrell Anderson, Sheyenne, N. Dak., who simply flopped the wheels on each side of the machine. Putting the convex side of the wheel to the inside moves the tire out 6 to 8 in.

"Makes it much easier to get at

chains, belts and grease zerks. One side benefit is that because the lugs on the tire are reversed, the tractor has better back-out traction if you get in mud or a soft spot."

Anderson's used the idea on both a Gleaner M-2 and a Gleaner to harvest wheat. It might affect row spacing in row crops, he notes.