

# Midwest Producer

**PRODUCER  
PROGRESS  
REPORTS**

Page 24-25

January 18, 2008

Send correspondence to Box 239, Tekamah NE 68061 or call 800-888-1380

www.midwestproducer.com

## Solutions

Manufacturers seek to remedy pivot track tribulations

**By Terry Anderson**  
Midwest Producer News Editor



Lindsay's Z--Trax exchanges a pivot tower's tires with a rubber track. (Midwest Producer/Terry Anderson)

**S**tuck in a rut?

If you've been around center pivot irrigation systems and haven't had a tower stuck or been jolted when you drive a combine over a dried, deep rut, consider yourself fortunate.

Ruts have been problematic for center pivots since they first appeared on the landscape a half century ago. And they still are.

Consider what Delmer Pelster faces. Pelster supervises the expansive

15,000-acre Niewohner Farms. Along with a large feedlot operation, the Niewohner operation has lots of fields with lots of hills on the eastern edges of Nebraska's Sandhills. About 90 percent of the fields are irrigated, with more than 100 pivots operating in Boone, Antelope, Greeley and Wheeler Counties.

"We've got some that are pretty nasty," Pelster said of the hills. "It

**Please turn to SOLUTIONS on Page 6**

### Opinions



Meet  
Cliff  
Morrow  
Page 5

### Livestock



How do  
hormones  
drive intake?  
Page 13

### Crops



Modesty  
is best  
policy  
Page 22

PRSR-STD  
AUTO  
US POSTAGE PAID  
ZIP CODE 68504  
PERMIT #280

## FOCUS ON IRRIGATION

# SOLUTIONS

### Continued from Page 1

depends on how much rain we get, but we have a fair amount of trouble with pivots getting stuck going up the hills. One of our biggest problem areas is going through ditches. If it's silted in, we'll spend a couple hours trying to dig it out and then walk it out."

With that many pivots, some that have been working for 30 to 35 years, Pelster has seen all the brands and a lot of the maneuvers designed to help remedy the problems.

"They all leave tracks. It doesn't matter what you have," he said.

So, what's the solution for pivot tracks?

Attempts have been made for decades. More than 30 years ago, a patent sought to solve the rut problem by attaching a plow behind the pivot tower to return the displaced soil into the rut. A Soviet patent in 1990 wanted to shelter the tower so the ground would remain dry.

All of the major pivot manufacturers — Lindsay, Reinke, T-L and Valley — have their theories and products.

Solutions vary. Many perceive the problem as too much pressure on the soil per square inch, with remedies that include wider tires or more tires on each tower, attachments to tire systems to redistribute the weight or simply reducing the weight. Some attempt to change the soil, with chemical applications or durable driving systems. Others try to move the track or limit the amount of water applied.

"Years ago they tried wire and cement," Pelster said. "I hated that, because now when you go to dig a pivot out, you hit cement."

He said he tried Mud Lugs, aluminum traction devices that clamp around a tire, fit most manufacturers' pivots and are easy to install and remove.

"But by the time you carried them out there, you were shot," he said. "We even tried 38-inch tires and that helped a little bit, but they leave a track, too."

Pelster, however, says Niewohner served as a "guinea pig" last year for a new product.

"We have one field that has a dam area and only gets water in it in a year like last year," he said. "We've never been able to walk through that thing until we put Z-Trax on. It walked right through it. I was impressed."

Z-Trax is marketed by Omaha-based Lindsay Irrigation and was introduced officially last year at Husker Harvest Days.

Z-Trax exchanges the tires with a rubber track that fits on the existing hub. Only the troublesome towers need to be replaced and no other modifications are required.

The tracks reduce the torque on the unit, which has been an issue on tire systems, and the rubber tracks absorb more of the shock. All components are sealed and the only maintenance is grease to the tension cylinder, said Ron Hansen, Lindsay senior project engineer. Other than a bearing or seal going out, the Z-Trax should last the lifetime of the tower, he said.

Hansen said tires create 40 to 60 pounds of pressure per square inch. Z-Trax's wider base distributes that pressure over a larger surface area and a reduction to 4 to 9 pounds per square inch.

Pelster had two Z-Trax, each installed on the last tower of two troublesome pivots. Both worked to his satisfaction and he hopes to order more. The difference may be if the time saved equates to the cost.

"I think if a guy had them on there at the beginning of the year, he wouldn't have near as many problems," Pelster said. "They don't make a track, just float across the top and that would be it."



exchanges  
the tires  
with a rub-

ber track that fits on the existing hub. Only the troublesome towers need to be replaced and no other modifications are required.