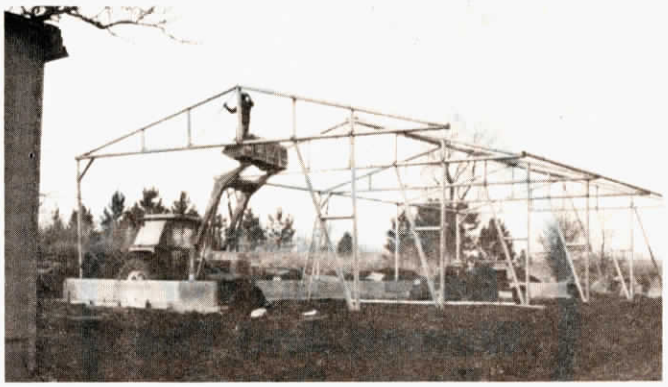

"Augers Make Great Machine Shed"

Steve Strauss, Leonardville, Kan., wanted a new machine shed but couldn't justify the cost of a new commercial structure. Instead he built a 40 by 80 building with 20 ft. of headroom using salvaged 5-in. dia. auger tubing.

"A friend had suggested using old oil field tubing but I couldn't find any reasonably priced. I finally came across a pile of salvaged auger tubing that had been slightly flood damaged. I bought 140 at $6.00 apiece, which is cheaper than 20-ft. 2 by 6 boards. The only thing wrong with the tubing was that there was a little silt inside them.

"The first thing we did was work out a design for the structure. Our plan was designed to use the full 20-ft. length of the tubing to reduce waste. The first step was to build the trusses. A jig was built out of railroad ties leveled on the ground and fitted with pegs to hold the tubes in place during welding. The resulting trusses were 38½ ft. wide. We used a cutting jig that fit tightly over each tube so all cuts with the torch would be the same. Because the tubing was galvanized and fairly thin — approximately ⅛-in. — it was a little difficult to weld. We used 50 lbs. of 3/32-in. 6011 welding rod altogether.

"After we built the trusses we tipped them up into place with a tractor loader to hold them in place temporarily by welding two or three purlins between them. Once all five trusses were in place the remaining purlins were cut and welded into place.

"We covered the framework with tin using self-drilling screws. They were expensive but the time saved was worth it. After a few months work I now have a building that's as strong as any I've seen besides being unique. While the cost of materials — about $4,000 — was fairly inexpensive, the cutting, fitting and welding was more time-consuming than a wood-frame building would have been. However, I've got a building that should last a lot longer."

Contact: FARM SHOW Followup, Steve Strauss, Rt. 1, Box 45, Leonardville, Kan. 66449.

Combine Modification Cuts Dockage To Less Than 1%

Bill Derkach was disappointed with the amount of unthreshed heads in the clean grain tank and the blockage that occurred when combining under tough conditions with his Massey Ferguson 760 combine. He solved both problems with a $600 modification, according to a report in Grainews, a Canadian farm magazine.

"The unthreshed heads would build up in the rethresher area and finally plug it," says the Ituna, Sask., farmer. "Then, I'd have to get off the combine, open the returns and dump about a bushel of heads onto the ground. I'd harvest another two tankfuls of grain and repeat the process."

Together with neighbor, Ed Karpinski, he converted two combines. They removed the rethresher and extended the elevator up into the grain tank. "We used the short chain conveyor from the rethresher and extended it," explains Derkach.

The elevator goes through the grain tank and is connected to a 5-in. dia. steel pipe that passes down through the firewall and through the engine compartment. The pipe continues behind and under the engine to the steel plate over the cylinder. They cut a hole for the pipe in the steel plate so the returns are placed directly onto the cylinder.

The original monitor was reinstalled behind the shield so if the conveyor stops or plugs, the problem shows up on the console in the cab.

Last fall the two farmers cut 2,800 acres between them with the two modified combines. "They worked beautifully — not one plugging problem — and much better then we expected," says Derkach. All grain they harvested was high moisture and had to be dried later.

Another big advantage Derkach found was the dockage was cut from about 6% to ½%. "Under tough combining or when you run through a low spot with green material or weeds, there would be many heads that wouldn't thresh as the rethresher overloaded. These heads would end up in the grain tank or be thrown over the shoe until the rethresher plugged, but not anymore."

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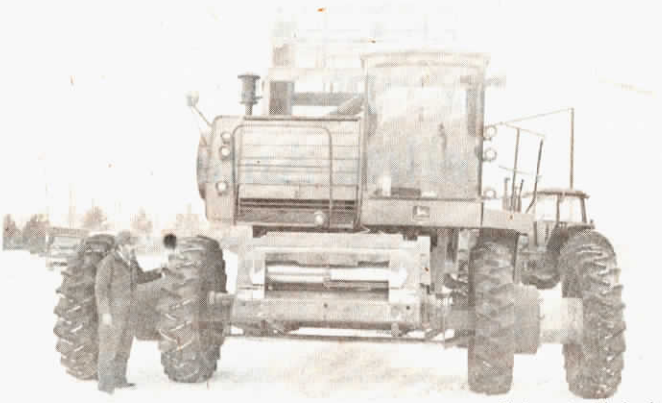

Photo courtesy The Land

22 In. Ridged Rows

Minnesota farmer Mike Tisdell, of Olivia, raises sugar beets, corn and soybeans. Wanting to consolidate his equipment, he now plants all three crops in 22-in. ridged rows. He notes that he saves by eliminating extra machinery, reducing fieldwork time and cutting down on erosion.

"A lot of farmers around here plant in 22-in. rows but we were the first to go with 22-in. ridged rows," says Jess Nolting, farm manager. Last year, he planted corn with 9-in. kernel spacings for 32,000 plants per acre. "Corn yields are getting better every year," says Nolting. "Last year, yields came in at 148 bu./acre while soybeans yielded about 40 bu./acre. Bean yields were down from our 50 bu. average, due mostly to wet weather during harvesting."

The Minnesotans use a modified Deere 7100 planter to plant 12 22-in. rows at once and also have specially built cultivating equipment. Their tractor is equipped with Keltgen "Tall Tires."

Their Deere combine is also modified for 22-in. row spacing. It has duals with each tire in the dual set spaced 44-in. apart center to center. The final drive is in the middle between the duals. The 12-row header was custom built. Since ridges make it necessary to make it to the end of the field before dumping the combine hopper, they added sides to the hopper so it now holds 320 bu. and also added a 3-ft. long, hydraulically-powered, vertical auger to fill the hopper to capacity.

Plant Your Garden In Straw Bales?

Oregon State researchers, experimenting with vegetable crops grown in straw bales, say the idea could be a good way to solve two problems at once.

"It provides an alternative use for straw, other than burning, and lets you grow crops on land that couldn't otherwise be farmed," says Delbert Hemphill, crop scientist at the North Willamette Experiment Station, who envisions straw bales laid out in low lying boggy areas where other crops won't grow, in rocky fields, or along fence rows to make use of unused space.

Hemphill says it's also an idea that gardeners might want to take a look at since some crops do better in bales than they do in normal fertile ground, especially tomatoes. "We had the most success with tomatoes, cucumbers, muskmelon, and squash. We were less successful with cauliflower, cabbage, and peppers," he says.

Nitrogen, water and other nutrients must be added to the bale to be successful: Hemphill says fertilizers and micronutrients are simply applied to the surface of the bales. Water carries the nutrients into the root zone. Researchers added dolomite, lime, phosphate, and several other minor nutrients.

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