



Curtis Hemstad secures 4 by 8 ft. plywood panels with a cable looped around the bin. Plastic top is secured to panelled sides with strips of lath and a ring of tires holds everything in place.



TEMPORARY GRAIN STORAGE FOR LESS THAN 7 CENTS PER BU.

Build Yourself A Plywood Grain Bin

by Doug Sorenson

There are all kinds of ideas for temporary grain storage, but one of the best we have seen lately is a plywood bin with a plastic cover, a do-it-yourself design that originated in Canada about 10 years ago.

Curtis Hemstad, grain farmer near Stanley, N. Dak., has been using this idea and improving it on his own farm for several years. He willingly passes on what he's learned to FARM SHOW readers who may need extra temporary grain storage.

Basic parts of the bin are 4 by 8-ft. sheets of 3/4-in. plywood which are overlapped 6-in. and bolted together with 1 1/4 by 1/4-in. bolts at each joint. A circle of 12 sheets makes a 3,000-bu. bin; 14 sheets make a 4,000-bu. size.

When the last sheets are bolted together into a full circle, Hemstad loops a 5/16-in. cable around the bin and tightens it with a turnbuckle.

The bin must be set up on well-drained soil, he says, and sod makes a good base that won't give problems with stones and gravel. Hemstad starts the pile of grain before he sets up the bin, which makes it easier to form the plywood sheets into a perfect circle. When the paneling is in place, he fills the bin with a standard grain auger, letting it come up naturally until the base of the pile is almost to the top of the plywood.

After the grain is safe from heating, Hemstad puts a 6-mil plastic cover over the top of the pile. He lets it lap over the plywood 6-in., then fastens it in place with wood laths.

Hemstad cautions that the grain must be dry before it is covered because the plastic forms an airtight seal and damp grain will heat. He recommends 14% moisture or lower. He has stored wheat for up to 8 months in one of these bins.

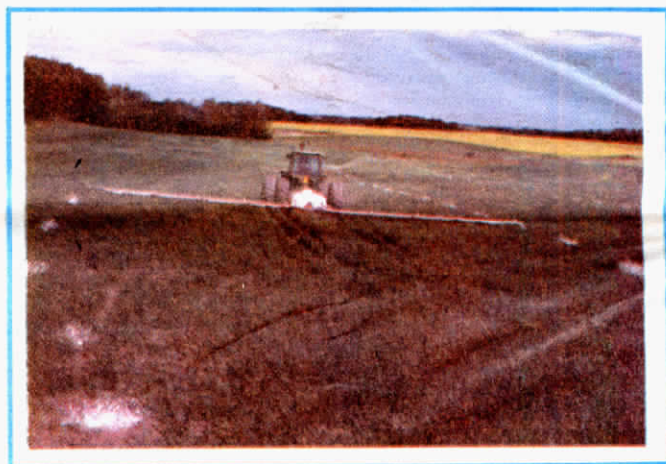
Final touch is to lay a ring of about 30 tires on the plastic, lash them together with rope, and anchor the rope in about three places. A 4,000-bu. bin should have two rows of tires.

To open a bin, Hemstad takes out a few bolts at a seam and it usually bulges open enough to insert his auger. Or, he cuts a hole with a keyhole saw. Once a bin is opened, it should be emptied without too much delay, he points out.

There are some other "secrets" to putting up the bin that Hemstad has learned by experience. For instance, the plastic has to be put on when there is no wind, and the plywood sheets are usually assembled in sets of three before being completely attached.

Hemstad estimates cost of the temporary bin to be right at \$200 for the 3,000-bu. size. When empty, the wood panels can be taken apart and stacked up for inside storage to be used again for several years. The only new expense is for the plastic.

For more details on this kind of temporary grain storage, contact: FARM SHOW Followup, Curtis Hemstad, Stanley, N. Dak. 58784 (ph. 701 628-2714).



Spot marker uses air pressure to place spots of non-toxic aluminum paint at regular intervals.

NO MOTOR OR PUMP

Marker Eliminates Skips

New field marking systems use paint instead of foam to mark passes. Latest new introduction is the "Spot" field marker from Marshall Holdings Ltd., in Turtleford, Sask. It uses aluminum paint powered with air pressure to place spots at regular intervals automatically.

"This system is simpler, and requires less maintenance because it uses air rather than an electric pump," says Andy Brossart, sales representative for the new system. "Just 100 psi in a 10 gal. tank lasts 300 to 400 acres."

You can operate the spot system from your tractor cab, setting spots at the distance and size you need. Easily adapts to conventional spray booms, with just a screw driver and a knife, according to Brossart. Runs off 12-v.

power and the holding tank carries 4 1/2 gal. of marking fluid, enough for 500 acres or more, depending on the frequency of your mark.

The "paint" used is a non-toxic, commercially pure aluminum mixed one quart to 4 gal. diesel fuel. Silver, explains Brossart, shows up in any field conditions, from new crop, to field stubble, to black dirt.

Besides sprayers, the system is used on grain drills, fertilizer spreaders and liquid applicators. A kit to equip a 70 ft. boom sells for \$597, plus \$8.95 per quart for the special paint.

For more information, contact: FARM SHOW Followup, Marshall Holdings Ltd., Box 165, Turtleford, Sask. S0M 2Y0.