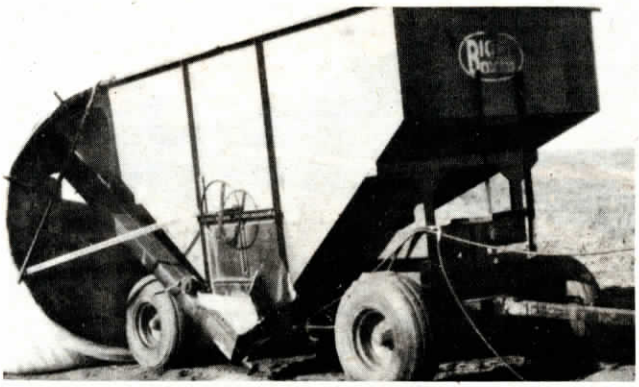


Home-Built Grain "Bagger"

Another option for those short of storage space is bagging grain in plastic bags. While there are numerous firms offering commercial rigs, Ermin Benes, Valpariaso, Neb., built his own using materials from around the farm.

Benes has only used the bagger and the bagging system with high moisture shelled corn but he notes that it should work just as well with dry corn.

Benes started by attaching a flat-top U-trough 6-in. dia. auger from a grinder-mixer to the dump gate of a side-unloading gravity box. An old circular stock watering tank was then supported from the rear of the wagon box. A V-shaped slot was cut in the bottom of the tank for the auger. The bottom edge of the 8 ft. dia. tank is about 10 in. off the ground and the silage bag, also about 8 ft. in dia., is wrapped around the tank.

Corn is hauled from the combine in an auger wagon and unloaded into the gravity box. A tractor hooked to the wagon-bagger unit provides hydraulic power for the orbit motor which drives the auger. As the bag fills, the tractor and wagon are moved ahead.

"The auger extends far enough into the bag that corn will not pile up against the bottom of the tank. This lets the bag unfold freely as the bagger moves ahead," explains Benes.

Benes notes that each 8 ft. dia., 150 ft. long bag holds about 4,600 bu. for a cost of a little more than 4¢ a bu.

After each bag's filled, the end's wrapped around a 2 by 4 and a lathe nailed to it to seal the bag.

Benes' suggestions for others wanting to make a home-built bagger include: 1. Use an auger with hydraulic motor — it's more convenient than a belt or chain drive. 2. Keep joints tight where grain enters the auger to prevent grain loss. 3. Use an open end auger and don't let grain pile against the end of the auger. 4. Extend the auger far enough into the bag so grain won't roll down and interfere with unfolding of the bag. 5. Fill bags on the level if possible. If you must store bags on a slope, fill from the bottom of the hill and work up. Working downslope keeps grain rolling down and the bag won't fill completely.

Contact: FARM SHOW Followup, Ermin Benes, Box 141, Valparaiso, Neb. 68065 (ph 402 784-2854).

Build A Bin Inside A Shed

One option for storage-short farmers is putting up a "roofless" grain bin in their pole barn or machine shed.

"What you can do, for example, is buy a 6-ring bin, minus the roof, take the top 3 rings and bottom 3 rings and set both of them side by side in your shed. After emptying the bins, you can put the two halves together outside, set them on a concrete pad and add a roof," says Max Tate, district manager for York Mfg., York, Neb. Other advantages of this idea Tate adds, is that now it's easier to get rings than a complete bin, you don't need to install a concrete pad and you can quickly put the bin up yourself.

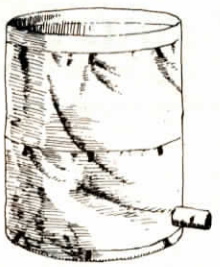
Lee Chedester, territory manager for Stormor, Fremont, Neb., points out that by putting the bin inside, you're protecting the grain from the weather plus you don't have the added expense of putting in extra wall supports that you'd have if you used the shed for flat storage.

Chedester says that a 3-ring bin (about 8 ft. high) and 48 ft. in dia. would hold about 14,000 bu.

Both Chedester and Tate stress the importance of having aeration systems in the bin to keep the crop in condition.

Quotes for bin-in-a-shed storage costs range from 20 to 30¢ a bu.

For more information, contact your local grain bin dealer.



Liner Turns Cribs Into Bins

You can make use of abandoned corn cribs with a fabric liner that seals up cribs for weathertight grain storage.

"Two men can easily install a liner in less than an hour with no tools.

It's made from a woven plastic material that's moisture proof, rot proof and treated to resist breakdown from the sun's rays. It's "rip-proof" and has an expected average life of 4 to 5 years, according to Roeder.

Three ropes connect the liner to the crib. You simply spread the liner out inside the crib, start weaving the rope through the loops on the fabric and work toward the top.

Liners for any size bin, round or rectangular, sell for 12 to 15 cents per bushel for medium size cribs, and as low as 10 cents for larger cribs. A similar liner is available for concrete silos.

For more information, contact: FARM SHOW Followup, FOF Products, Inc., P.O. Box E, 1505 Racine St., Delavan, Wis. 53115 (ph 414 728-2686).

Photo courtesy Grain Farmer

Underground Grain Storage

An Australian grain farmer who needed long-term storage but couldn't justify construction of new structures went underground to come up with reliable storage at 1/5th the cost.

Wally Thorn, who farms near Glen Alice in New South Wales, dug a 79 ft. long pit that's 14 ft. wide to store about 5,500 bu. of small grain. He figures he can store grain indefinitely in the underground bin at an initial cost far below the cost of above ground permanent structures.

"It cost about $600 to dig the pit and get to the point where it's ready to hold grain. To cover it over will cost about another $200," says Thorn. "It's a cheap form of long term storage. I don't anticipate any insect damage or moisture problems."

In-ground storage of grain is not a new idea in Australia. Many farmers recall underground storage pits built years ago during severe droughts that were opened after 10 years or more with no sign of damage.

Alan Andrews, researcher at the Agricultural Engineering Center at Glenfield has researched the underground storage idea.

"It's certainly quite a lot cheaper than traditional methods of storing grain and, if done well, can make the grain very secure. It's fairly important to place the pit correctly. It must be on a well-drained site where water is not going to lie around," Andrews cautions.

He recommends that farmers only store small grain with a moisture content of 13% or less. He says completely wrapping the grain in plastic is probably unnecessary and he recommends just a sheet extending over the top and down the side of the pit part way. He says the layer of soil over the top of the plastic — as much as 20 in. — is what keeps out most pests. Pits are emptied from one end, which is left open, by tractor loaders and augers.

(Continued on next page)