



Swing-away intake auger is low enough to fit inside most flat storage buildings. Works great for loading out trucks.

**“LOADS INTO OR OUT OF FLAT STORAGE”**

## Self-Propelled Hydraulic 70-Ft. Folding Auger

A hydraulically-powered, self-propelled 70-ft. folding auger allows Vernon Erickson, Delamere, N. Dak., to quickly load or unload grain into and out of bins or flat storage.

“It works fast and is always ready to go,” says Erickson, who has built 12 of the self-propelled augers so far and sold them to area farmers and elevators.

The 10-in. dia. auger is built in three sections that hydraulically fold up for transport. A 20-ft. swing-away intake auger is mounted on one end, and a 50-ft. discharge auger that includes a 30-ft. center section and a 20-ft. front section is mounted on the other end. The auger is mounted on a 3-wheeled frame that's equipped with a seat and steering wheel. Power is supplied by a 60 hp diesel engine. It has a hydrostatic transmission with a top speed of 14 mph.

“It eliminates the need to start up tractors or hook up pto shafts, and it's flexible enough that it can be used with any size bin or flat storage building,” says Erickson. “We built it because we didn't like the cost and inconvenience of operating grain vacuum conveyors and because conventional augers require too much labor and have belts and chains that break down. Also, we wasted a lot of time backing conventional augers up to our bins. This self-propelled

auger allows us to drive right up to them. The discharge auger reaches up to 38 ft. high so it'll reach the top of a 35,000-bu. bin.

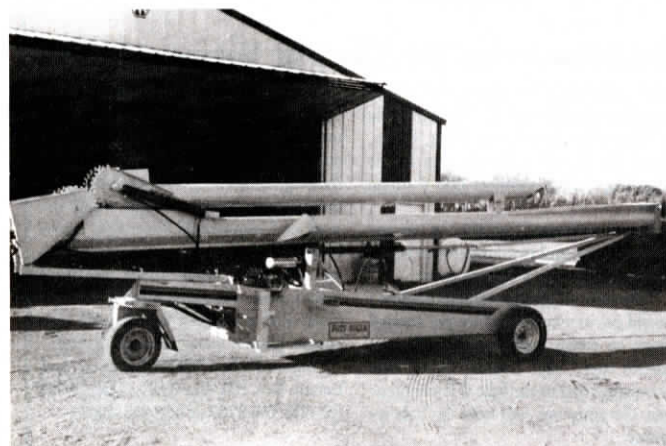
“It also works great for flat storage because the discharge end of the auger drops down as low as 6 ft. off the ground. The swing-away intake auger is only 14 ft. high and will fit inside the door of most buildings. The 70-ft. long auger allows us to back trucks or semi-trailers into the building and load them 'lengthwise'. The intake auger can be equipped with a 360 degree bin sweep that can be used inside bins or to remove grain from behind bulkheads in flat storage.

“The auger is also reversible for easy cleanout. Works great for cleaning out certified seed.”

The auger folds to 30 ft. long and 7 1/2 ft. high and can be towed.

Erickson custom builds the auger in 8, 10, or 13-in. diameters and in 50 to 75-ft. lengths. A 13-in. dia. auger has a capacity of 8,000 bu./hr; the 10 in. dia. auger handles about 4,000 bu./hr. He spent about \$15,000 to build his auger.

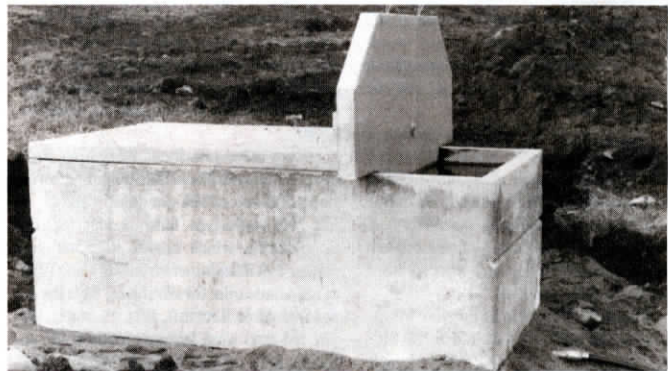
For more information, contact: FARM SHOW Followup, Vernon Erickson, Rt. 3, Box 118, Delamere, N. Dak. 58022 (ph 701 427-5800).



The 10-in. dia. auger is built in three sections that hydraulically fold up for transport.



Self-propelled auger can be driven right up to bins. Reaches up to 38 ft. high.



Concrete waterer is spring-fed. The constant flow of water helps keep it ice-free.

**NO-MAINTENANCE, HEAVY-DUTY DESIGN**

## “Self-Heating” Water Tank Never Freezes Up

By Nancy Lowe Lonsinger

When Bob Mikesell came up with the design for his new freeze-proof waterer, the only way he could test the first ones he installed was to wait for cold weather. After the winter of 1993, which was the coldest in Frazeyville, Ohio, in 20 years, he was happy to discover he didn't have a bit of ice in his big concrete waterers.

“When you hate to chop ice off a watering trough as much as I do, that's good news,” says Mikesell.

He got the idea for his half-buried waterers from observing his neighbors spring house cave which ran free all winter. He decided to build a “cave” for each trough in his pasture.

Mikesell took the idea to Don Brown, a local Soil & Water Conservation District technician and asked him to help draw up plans for a tank buried under 30 in. of dirt, leaving only enough open area for animals to drink. Brown worked out the details regarding water circulation, size of tank, and size of opening. A smaller tank would have been easier to design but Mikesell wanted one with at least 150 gal. capacity. He told Brown, “I never want ice that I can't break with a flick of my finger.”

Using Brown's plans, United Precast of Mt. Vernon, Ohio built the first tank in Jan. 1992. It didn't work as well as they wanted, in part because it wasn't installed facing the sun. During the year, five more tanks were installed and other farmers in his Soil & Water district who qualified for drought relief assistance, also adopted the idea.

The waterers are spring-fed and the con-



Tank is buried under 30 in. of dirt, leaving only enough open area for animals to drink.

stant flow of water also helps keep them ice-free. Mikesell channels water into the tanks through perforated pipe. Last winter, sub-zero weather put them to the test. Of the six tanks Mikesell installed, only one had any ice at all and that was just in one corner.

“These freeze-proof tanks cost more but anyone who has something more interesting to do than chop ice will appreciate them,” states Mikesell.

He advises fencing them off so cattle won't trample the “cave” top. He installed his tanks in fields where he winter feeds cattle and sheep with hay and a late planting of turnips. The land has rolling hills. He notes that it would be difficult to adopt the idea on flat pasture.

For more information, contact: FARM SHOW Followup, Bob Mikesell, 18176 CR 3, Frazeyville, Ohio 43822 (ph 614 327-2575) or Don Brown, SWCD, S. 7th St., Coshocton, Ohio 43812 (ph 614 622-8087).