Simple Drag Improves Seedbed

Drilling wheat or annual ryegrass into cloddy fields is no longer a problem for Earl Cox and some of his neighbors.

Cox, a Temple, Oklahoma, cattleman and farmer, devised a simple drag that mounts on his grain drill frame in front of the openers to crumble clods and leave a fine, firm seedbed.

"It's really pretty simple," he says. "I use a length of 5-in. steel I-beam that matches the width of the grain drill. I hang it from the frame with 3/8-in. chain, so when the drill is in the ground, the beam is positioned about 3 in. in front of the openers."

Cox says he's made several similar drags, usually finding the I-beam in a salvage yard.

Since his drill has three 12-ft. sections, Cox's current drag is in three 12-ft. sections.

"I've found you need to adjust the length of the chain according to field conditions," Cox says. "If the field is soft, the chain may need to be shortened to keep the drag ahead of the openers."

As the I-beam is pulled over the soil, it first pushes soil ahead and then the top channel fills with soil. Cox says the extra weight makes it work better.

He says the only problem he's had with his drag was the ridges that built up as soil spilled around the ends of the I-beams.

This problem was solved by Butch Reece, also of Temple, who had adopted Cox's I-beam drag idea. "He cut off the bottom lips of his beams, starting about 8 in. from the ends and angling straight up to center at the ends. It lets the soil spread more as it passes around the end of the drag, so you don't get a sharp ridge," Cox says.

He says the drag has given him better stands and, since it packs the soil, too, it helps conserve soil moisture, which is usually critical for establishing a stand in his area.

Cox's drags are easy and inexpensive to make. "And they'll last a long time," he says.

Contact: FARM SHOW Followup, Earl Cox, RR #1, Box 232A, Temple, Okla. 73568 (ph 580 342-6632).

Drag consists simply of three 12-ft. sections of I-beam hanging from front of drill (left). Cox also uses drag on back of chisel plow (right).

2-Wheeled, Electric-Operated Forklift Built For ATV

"It can raise loads up to 7 ft. high and works better than anything on the market," says Mike Nordby, Grygla, Minn., who made a 2-wheeled, electric-operated forklift that he uses either in front of or behind his Polaris 4-wheeler.

The forklift has a 7-ft. long hitch, with the lift mechanism located directly above the wheels and axle. A 1,500-lb. electric winch, which operates off the ATV's battery, mounts at the base of the forklift.

"It's built strong and comes in handy for a number of different jobs around my farm. I've even used it to load lawn mowers into the back of my pickup," says Nordby. "The long hitch provides the leverage to carry heavy loads. I've used it to lift up to 10 sheets of plywood at a time, and one time I even used it to lift a big tractor wheel. By building a box to stand in I could even use my forklift as a deer stand. Another advantage is it's very easy to maneuver. I've seen forklifts that mount directly on the ATV, but they make it so hard to steer you almost need power steering.

"Whenever I use the forklift on front of the ATV and lift a heavy load, it makes the ATV lighter in front. To solve the problem I just add weight to the ATV's front rack.

"I came up with the idea because I do maintenance work inside a big Quonset shed that doesn't have a ceiling hoist. I used mostly scrap materials to build it.. My total cost was only about $60."

Contact: FARM SHOW Followup, Mike Nordby, Box 202, Grygla, Minn. 56727 (ph 218 294-6659).

"It can raise loads up to 7 ft. high," says Mike Nordby about the 2-wheeled, electric-operated forklift he uses with his ATV.

Tag-Along Bale Scale

"It lets you know if bales are too heavy or light so you can adjust your baler accordingly. It's accurate to within half a pound," says California farmer-inventor Andrew Bloom about his new tag-along weigh scale for small square bales that lets you weigh bales on-the-go.

The scale rides on two small wheels directly behind the bale chamber. It attaches to the baler with two pins that form a hinge, allowing the unit to roll smoothly over uneven ground. A load cell that attaches to the platform weighs the bale and sends the weight of each bale to a monitor on the tractor. The monitor keeps a running total and will also keep separate totals on different fields so field performance can be rated. At the end of a baling session, the operator can easily get the total weight, number of bales, average weight, high weight, and low weight for a field.

To attach the weigher you first weld two steel plates under the bale chute. The unit can be adapted to fit most brands of small square balers.

Sells for $2,400.

Contact: FARM SHOW Followup, HayWeigh Systems, 7714 S. Hwy. 33, Gustine, Calif. 95322 (ph 209 854-1533 or 209 324-0754; email: HayWeigh@aol.com).

Tag-along bale scale rides on two small wheels directly behind bale chamber. In-cab monitor, above, tracks individual and cummulative weight.

Bin Windows Help Check Grain Level

Chuck Barth, B&B Farms, Enon Valley, Pennsylvania, decided he was getting a little old to be running up and down the ladder to check the grain level in his on-farm storage bins, especially at night.

So with help from his sons and farming partners, Scott and Dan, he added windows to every ring in each of his 10 bins.

"Now we can see how full the bins are from the ground," Scott says. "It saves us all a lot of time and effort when we're filling and when we're unloading the bins."

The Barths made the grain bin windows from 3-in. schedule 40 pvc pipe, covered on the inside with a piece of 1/8-in. plexiglas.

"We installed them next to the ladder, with one in the top of each ring," Scott says.

They cut the plexiglas into 4-in. circles, so they lapped over the edges of the 3-in. pipe by about 1/2 in. all the way around. Scott says they used a utility knife to score and cut the plexiglas, but still had to smooth the edges with a grinder.

They cut the pvc pipe into 1 1/8-in. lengths using a chop saw. "The pvc pipe needs to be just long enough that it extends past the ribs in the bin sides," he says.

Then they used pvc pipe glue to fasten the plexiglas windows to the pvc pipe sections.

Standing on the bin ladder and using a cutting torch and a template they made to fit the pvc pipe, they cut circles in each ring, cleaned off all the dirt and debris on the inside and outside of each cut, and inserted their preassembled bin windows, with the plexiglas on the inside of the bin. "That way, the grain won't push against the plexiglas and break it off," Scott explains.

And because the plexiglas laps over the pvc pipe, even if the pipe is pushed loose, the grain on the inside can't force it completely out of the hole.

Once the windows were in place, they caulked them inside and out with the best silicone caulk they could find in order to keep air and moisture from leaking into the bin. Besides sealing around the pipe, the caulk also helped glue the windows in place.

Finally, they used aluminum paint to cover the caulk and any scorched places on the bin caused by the cutting torch.

"It really makes it easy to check the bin level," Scott says. "At night, all we have to do is turn on the light in the bin and look at the windows to see how full it is."

With the windows located at the top of every ring directly beside the ladder, they can clean them easily.

Scott says the out-of-pocket cost was less than $25 per bin, with the plexiglas being the biggest expense. He says pre-assembling the windows was quick and fairly easy. Installing them was a little slower. With the cutting, cleaning and caulking, they could only install windows in two of the 12-ring, 30,000-bu. bins per day. With 10 bins to do, it took about 5 days to complete the job.

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Bin windows are made from 3-in. pvc pipe, with one side covered by a piece of 1/8-in. clear plexiglass.

Barth put a window in every ring in each of his 10 bins. They're next to the ladders so they're easy to clean.