Home-Built Tools Make Garden Work Easier

Garden-Sized Moldboard Plow

Bob Hudspeth had a problem. Using a full-sized, tractor-pulled moldboard plow to turn over his garden caused too much compaction of the loosely tilled soil. But he couldn't find a commercial garden, tractor-sized plow to do the job.

"I decided to build a plow that I could pull behind my 18 hp Yardman tractor. I used spare parts that I had on hand.

"The tires and wheels came off a worn-out riding mower. The axle is a piece of 2-in. sq. tubing 21 in. long. I welded a 7-in. long 'leg' to each end, also made from 2-in. tubing. A 5/8-in. dia. bolt welds to the lower end of each to fit the wheels. A tongue runs from the front back across the axle to a pivoting plow share taken from an old cultivator. I added moldboards to the cultivator share to get a wider furrow. For added weight, I bolted on two wheel weights and a cultivator seat for a rider. For rider safety, I also mounted a handhold bar.

"It does a good job of turning the topsoil, with or without a rider. And if I take off the plow share, it provides a fun ride behind the mower for the grandkids."

"It does a good job of turning the topsoil, with or without a rider," says Bob Hudspeth, who pulls his home-built plow behind his 18 hp Yardman tractor.

Contact: FARM SHOW Followup, Bob Hudspeth, Box 51, Era, Texas 76238.

Chisel Plow For Garden Work

"Last winter I built a mini replica of a field size chisel plow for use in my garden. I use my Deere STX 138 garden tractor to pull it," says Jeff Schueller, Marshall, Minn.

The mini chisel plow rides on a pair of 8-in. wheels off an old riding mower and is equipped with five shanks that dig up an area about 2 1/2 ft. wide. Schueller can adjust shank depth right from the tractor seat by pulling on a handle that's connected to the rear axle. The handle locks in place anywhere along a notched column.

"I used it for the first time last spring. It leaves the soil nice and fine and, unlike commercial pull-type cultivators, doesn't need any extra weights - the weight of the wheels keeps the plow from hopping," says Schueller. "I usually run the shanks 4 or 5 in. deep. My garden tractor has about 12 hp. If it had more power I could probably run the shanks about 8 inches deep. I like using it a lot better than a rototiller because it runs smoother and tills the soil finer."

A clevis on the hitch lets the rig float up or down with the ground contour. The clevis bolts to a vertical steel tube with a series of holes in it. If I ever switch to a different tractor I can unbolt the clevis and reposition it to fit the new tractor," notes Schueller.

Schueller pulls his home-built mini chisel plow behind his Deere garden tractor. It rides on a pair of 8-in. high wheels and is equipped with five shanks that dig a path 2 1/2 ft. wide.

Contact: FARM SHOW Followup, Jeff Schueller, 3083 260th St., Marshall, Minn. 56258 (ph 507 537-1023 or 8750).

Do-It-Yourself Drum Marker Helps Space Plants Accurately

If you garden in a big way, either for your own food or vegetables to sell, you know how important it is to space plants accurately.

Marking spots to set out plants can be backbreaking work. But with a little time and trouble in the shop, you can make a marker that can either be pulled by hand or behind a small garden tractor.

This rolling marker was devised by Bob Meyer, an agricultural engineer at the University of Wisconsin. Meyer used a section of 12 in. diameter PVC pipe. You'll want to cut the drum section as wide as the beds you're planting, or, if you're planting in rows, wide enough for several rows. The axle assembly on which the drum rotates is made of galvanized steel plumbing fittings.

Meyer cut two 12-in. circles out of 3/4 in. plywood to fit in the ends of the drum and fastened them in with screws. In the center of each of these plywood ends, he inserted a 3/4 in. floor flange to make the hub for the pipe axle. He made a handle of 1 in. PVC pipe. Meyer made scoops for the marker using 4-in. sections of 2 in. diameter PVC pipe cut in half length-wise at a 45-degree angle. He fastened these to the drum in the appropriate spacing using 2 in. metal angle brackets.

A 12 in. diameter drum has a circumference of about 3 ft. (37.69 in., actually). If you want to put plants about 1 ft. apart, you'll need to place three scoops for each row on the drum. If you need to put plants more than a foot apart, you may want to go with a larger drum. For example, a 16-in. pipe has a circumference of just over 50 in., so you could put 5 scoops around it for a 10 in. spacing. Or, putting 4 scoops evenly around it would give you a spacing of little more than 12 in. And 3 scoops placed evenly around a 16 in. drum would space plants at just a little more than 16 in.

Another note on the axle for the drum marker is to make the 3/4 in. pipe axle long enough to extend through the drum and handle and far enough so weights can be mounted on both sides to make it heavy enough to cut into the soil.

Complete plans are available from the Healthy Farmers, Healthy Profits group on the Internet at http://bse.wisc.edu/hfhp.

Contact: FARM SHOW Followup, Bob Meyer, c/o Biological Systems Engineering, 460 Henry Mall, Madison, Wis. 53706 (ph 608 265-9451; E-mail: rhmeyer1@facstaff. wisc.edu).

Meyer made scoops for the marker using 4-in. sections of 2-in. dia. PVC pipe, cut in half length-wise at a 45-degree angle.

Plastic Overhead Door Helps Heat Your Shop

A new, virtually indestructible plastic overhead door can turn a cold shop or garage into a warm, bright haven where it's comfortable to work, even on the coldest winter days.

"The Sunshine Door" is made from Lexan plastic, a tough polycarbonate that acts as a super conductor of heat. Thanks to the insulation provided by its triple-layered construction, solar heat captured by the door remains inside.

On a sunny day, you don't need a heater or lights and you can stand a few feet away from the door without a sweater, according to Doormasters co-owner, Dan Murdock in Red Deer, Alta.

Murdock sells the special plastic doors of various sizes based on custom orders, and also sells individual Lexan panels which can be used to replace panels on existing doors. These panels can be purchased in sizes up to 24 ft. wide.

The biggest Lexan door that Doormasters has sold was 24by 40 ft.

"It doesn't create a problem in the summer because most people ordinarily open their doors in the spring," says Murdoch. "Also, the sun is a lot higher in the sky in summer, so you don't get the direct sunlight as much. With the door closed on a cool, rainy day, it's just like the door is open because it maximizes the available light."

According to Murdock, the Lexan plastic used is translucent, so you can't see through it clearly. It lets 87% of light through and is 40 times stronger than glass.

At a trade show where he was promoting The Sunshine Door, Murdock told the crowd of farmers that if anyone could break it with a 16-lb. sledgehammer, they could have his Porsche car. No one was successful.

Prices for the panels and doors vary according to the size of the order.

Contact: FARM SHOW Followup, Doormasters, Attention: Dan Murdock, Bay 6, 4830 - 78 St., Red Deer, Alberta, Canada T4P 2B3 (ph 800 886-9409 or 403 347-8670; fax 403 341-4630; E-mail: doormast@telusplanet.net; Web site: www.sunshinedoor.com).

"Sunshine Door" is made from Lexan plastic, a tough polycarbonate that acts as a super conductor of heat.

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