### **3-Pt. Tractor-Mounted Tile Plow**

A Minnesota farmer with wet fields that needed more drainage but who couldn't justify the cost of hiring a tile contractor, built his own simple 3-pt. tile plow that he used successfully to lay over 2,000 ft. of tile last fall.

Harold Williams made his plow using 6-in. sq. tubing with 1/4-in. thick sidewalls for both the vertical and horizontal members, which form a "cross" shape. He put a 4-in. dia. pipe (1/4-in. sidewall) inside the vertical tube, with 3-in. angle irons welded to either side of the pipe to keep it from turning. The pipe and angle irons move up and down inside the vertical tube, controlled by a hydraulic cylinder that mounts on back of the vertical tube. The shoe/sweep mounts at the bottom of the pipe.

The 3-pt, drops the plow 22 in, and the cylinder drops it another 24 in, for a total depth of nearly 4 ft. He pulls it with a 135 hp. tractor with duals.

For grade work, you need a surveyor's string or a laser. It'll lay 4 in. perforated tile.



"Our total cost is about 20 cents per running foot of tile," says Williams.

Contact: FARM SHOW Followup, Harold Williams, 11933 75th Ave S.W., Raymond, Minn. 56282 (ph 612 967-4577).



#### **Pickup-Mounted 60-Ft. Sprayer**

Kerry Brillon used to cover about 35 acres an hour with his 60-ft. pull-type sprayer. Nowadays the Scobey, Mont., farmer still uses a 60-ft. sprayer but he's covering 80 acres an hour - including filling up and mixing chemicals - because he mounted the sprayer on his pickup.

The boom's made out of 1-in. sq. tubing and is mounted just behind the cab, and there's a 200-gal. tank in the back of the truck. A short section of boom mounts behind the truck bed.

"We've been using the sprayer for 7 years now with no problems at all. It features quick-release boom sections at the ends that protect it if any obstruction is hit. And the booms fold back in a minute or less for road travel. The sprayer's fitted with an electric clutch activated pump that you can control from inside the truck," says Brillon, who built the sprayer hinself, saving more than \$3,000 over what he would have paid for a similar commercial-built rig.

There's no marker on the drill. Since Brillon uses a 30-ft. grain drill he just sprays two of the drill passes at a time.

Brillon says cost of parts to build the sprayer would be about \$1,250, including the pump and tank. He's willing to make a video and computer designed blueprints available if there's enough interest.

Contact: FARM SHOW Followup, Kerry Brillon, P.O. Box 93, 113 Main St., Scobey, Mont. 59263 (ph 306 476-2727).

#### **Do-It-Yourself Foam Marker**

When Virgil Fuchs built himself a 90-ft. wide field sprayer, he needed an easy-tosee marking system for the extra wide booms. After tossing the idea around, he came up with a simple design for his own foam marker that uses standard over-theshelf components.

Power is supplied to the air system by a pair of inexpensive 12-volt powered air compressors. "They're the type designed to plug into your car's cigarette lighter. They're on sale all the time for \$16 to \$19 at discount stores," says Fuchs.

He wired them into the tractor's electrical system and put an on-off switch for each marker in the cab. The compressors attach to the booms with mounting brackets Fuchs made. Air is pumped into 5-gal. plastic pails filled with standard foam marker solution. A tire valve stem is fitted to the bottom of each pail and hooked up to the compressor. A 15-ft. 1 1/4-in. plastic pipe runs out the top of each pail and out to the end of the boom (he has 8ft. "breakaway" sections on each end of the sprayer).

When he wants to drop a glob of foam, he just switches on the marker at either end (or both at once) which blows air up through the soap solutions and forces foam out the marker tube. "The compressor only runs when you need the foam so it's not hard on them. They're cheap and easy to replace when they do wear out," says Fuchs.

Contact: FARM SHOW Followup, Virgil Fuchs, 40949 275th St., Belgrade, Minn. 56312 (ph 612 254-3341).

#### Hydraulic-Controlled Adjustable Sway Bar

A hydraulic-controlled sway bar gives Maine potato farmer Glenn Duff more control over 3-pt. mounted equipment.

Duff attached a hydraulic cylinder to a telescoping sway bar that he made out of a piece of 1 1/2 in. dia, pipe with a piece of 1 1/4-in. pipe inside. Then he welded regular sway bar ends to either end of the bar. He attached "ears" to the cylinder and then welded them to the sway bar. They're set so the piston cylinder is extended about half way at the normal setting. That way he can use the cylinder to move the 3-pt. arms either way.

"It works great for any row crop work, particularly cultivating on side hills.



Makes it easy to hold equipment on the row," notes Duff, who uses the adjustable sway bar on his Massey Ferguson 180 and 1080 tractors.

Contact: FARM SHOW Followup, Glenn E. Duff, RR 2, Box 317, Houlton, Maine 04730 (ph 207 532-2669).



## **Crank-Up Hog Building Doors**

Opening and closing more than 30 doors on the back side of this Missouri hog confinement building is a 2 min. job now thanks to a crank-up cable system.

"We drilled holes through the back of the rafters and put pieces of 1-in. pipe through them along the length of the barn, and then welded them together and put a big crank on one end," says Brad Jacobs, Drexel, Mo. "Then we drilled holes in the pipe at each door to put cable through, and attached the other end of the cable to the bottom of the door. When we turn the handle, the doors all raise or lower at once.

"We put the doors by our feeder pigs and smaller hogs on different cranks from the sows and bigger market sows, so all the doors don't have to open at once. The idea saves a lot of time and hassle and was relatively easy to do."

Contact: FARM SHOW Followup, Brad Jacobs, Rt. 1, Box 55, Drexel, Mo. 64742 (ph 816 267-3335).



# Dirt Scraper/Leveler "Works Great"

"This scraper works great for snow, mud, dirt or manure," says John Hofer, who raises geese near Cut Bank, Mont.

"It works well in sloppy barn yards to pull mud and manure out so it dries in half the time. Also, when I have snow drifts close to doors or wherever, I can back up to the building and drag the snow away.

"Fits any 3-pt. hitch. Measures 80 in. wide (with sides made out of 2 by 10 boards) and 84 in. long, but you could build it to any size depending on the size of tractor and what you want to do with it. "This is the cheapest and easiest way I

know to knock down piles and level them out. The backboard is slanted and braced. The one in the pictures is not complete. I put a 4 in. by 3/8-in. thick steel blade on the bottom of the back board that extends 3/4 in. below the side boards so wear is minimal on the wood.

"I pull this with a 1952 Ford Workmaster 850 tractor. I have a much larger scraper that I pull with a 4-WD frontwheel assist tractor that makes short work out of muddy corrals. The great thing about it is that it lets you clean out a muddy pen without leaving a lot of big holes like happens with a front-end loader. After you clean out a muddy pen with this, the pen dries level."

Contact: FARM SHOW Followup, John P. Hofer, Glendale Inc., Box 850, Cut Bank, Mont. 59427).