

“Owner’s Report” On Do-It-Yourself Tile Plows

Installing drainage tile on crop land can improve yields, sometimes by 50 percent or more. But hiring a tiling contractor is an expensive proposition and they’re often so booked up with work it’s difficult to get them to come out. The answer for many farmers? Do-it-yourself tiling.

We contacted farmer-owners of tractor-pulled tile plows in an effort to highlight those tile plows that perform with flying colors and to pinpoint the “lemons” that fail because of poor performance or failure of the dealer or company to provide service.

Here are some of their comments:

Tim Fox, Fox Hall Farms, Obion, Tenn: When Tim decided to start a sideline tiling business to supplement his farm income, he hopped in his truck and drove to Wayne’s, Inc. in Morgan, Minn. to buy a tractor-pulled tile plow.

“I looked at every tile plow on the market before I decided on this one,” he says. He had heard horror stories about do-it-yourself tile plows, from ripping the tile as it’s installed to plows that simply pulled apart while in use.

“I liked the idea that the Wayne’s, Inc., plow hooks to the frame of the tractor, which transfers weight to the wheels for traction.



Fox pulls his tile plow behind a Steiger 325 hp tractor.

It can be mounted or removed easily, since it pins to the drawbar and to two brackets mounted on the tractor frame.”

Tim says his tile plow is easier to get started than the pull-behind models. “That was one of the main reasons I chose this plow,” he says.

Other reasons included price and the amount of steel used in the plow.

“This plow is virtually indestructible,” he insists. “I’ve hit stumps that stopped the tractor in its tracks, with no damage to the plow.”

Since he started a year ago, Tim has put in around 250,000 ft. of tile. Much of that has been on his own farm, but he’s done work for a number of customers and has more work waiting.

“There’s a lot of land down here that needs drainage,” he says. “Tiling is somewhat foreign to this part of the world. There’s only one commercial tile contractor within 50 or 60 miles. We could have a lot more business if people realized what it could do for them. I’m finding I not only have to sell the tiling service, but I spend a lot of time educating people, too.”

Fox pulls his tile plow with an older Steiger 325 hp 4-WD tractor with duals all around. “All eight tires are full of fluid and I have a lot of extra weight on the back, but in this tough soil, I don’t always have enough traction, especially if it’s a little muddy.”

He’s thought about putting the plow on a tracked tractor so he can keep running no matter what the weather. Trouble is, a tracked tractor wouldn’t be able to steer with the plow behind it in the ground. So for now, he’s content to add a second tractor in front of his old Steiger when the going gets slippery.

Fox pulls a tile trailer behind his plow, which unrolls the tile as he goes. “It takes two semi loads of tile (six 3000- ft. rolls of

tile per semi) a week to keep it rolling when we’re busy,” he says.

Tim says a newer tractor, with more responsive hydraulics, is about the only wish he has right now. “I can’t think of a way to improve the plow,” he says.

Brian and Bruce Ihnen, Ihnen Farms, Lake Park, Iowa: The Ihnen Brothers wanted to be able to lay tile whenever they had extra time, but they didn’t want to spend a lot on a machine. After looking at several different plows, they decided on a frame-mounted plow from Wayne’s Inc.

“It looked like it was built heavier than the others,” says Bruce.

They’ve used the plow for both pattern tiling and for draining trouble spots. They bought a laser depth control system, too, to help maintain grade.

A big selling point for them was the ability to quickly change the boot, so they could go from one size tile to another. “It wasn’t really part of our plan, but we’re starting to do some custom work with it, too. The laser and changeable boot really come in handy for that,” he says.

They’ve had little trouble pulling the plow with their Case-IH 9270 4-WD tractor. “If we need to run when conditions are less than desirable, we hook a second tractor to the front on the 9270. We built a hitch that runs from the plow to the front of the 9270, so we’re not putting stress on the tractor. The hitch is tube steel that attaches to the front of the plow. It hinges where the 9270 articulates, and hooks to the drawbar of the front tractor,” he says.

Brad Miller, Freeborn, Minn.: “Most of my land is already tiled, but every year we need to put in another line in one place or another,” Brad says.

Brad and his neighbor, Lynn Sorensen, bought a tile plow from Farm Drainage Plows, Waverly, Iowa, 15 years ago. A couple years ago, they sold that one and bought a second plow, much like the first.

Miller and Sorensen have put in 40,000 to 50,000 ft. of tile with their new plow. For the most part, their machine is for maintenance of existing drainage.

“This plow is really simple to use. I think it’s the best value out there for the dollar. There are machines that are more expensive. And you can put on options like lasers, but we don’t need to,” he says.

Their Farm Drainage plow is 3-pt mounted but the 9370 Case-IH 4-WD tractor they wanted to pull it with had no 3-pt. hitch. They solved the problem by building a hitch for the tractor.

“Even though we don’t use it a lot, we can justify the cost by owning jointly and working together when we’re tiling,” Brad says.

Gary Weckwerth, Arlington, Minn.: Gary looked at a lot of plows before buying



Tiler’s digging chain wraps around 6-ft. dia. wheel and a pto-sprocket on top of the machine. V-shaped cutting teeth rotate toward the tractor.

Farmer-Built “Chain Saw” Tiler

Most do-it-yourself tiling machines are either tile plows or trenchers.

Jay Hagberg, Lafayette, Minnesota, and Randy Johnson, Gibbon, Minnesota, think they have a better idea. Their “chain trencher” tiling machine combines the good points of both tile plows and trenchers but requires less horsepower and works in virtually any type of soil and under any conditions, without having to add another tractor for traction.

After completing their second prototype, the men are now confident their first-of-its-kind machine does everything they’d hoped. They’ve applied for a patent and are looking for feedback from farmers on the design.

“Our first machine was 3-pt. mounted. It worked well, but we decided a pull-type machine would be better. You don’t need speed or traction to make this tiler work, but you do need to maintain the engine speed to keep the pto at 1000 rpm’s. We pull it behind a 170 hp front wheel assist tractor with creeper gears in the transmission because it needs to go slower than most farm tractors will go,” Jay says.

The machine consists of a digging chain wrapped around a 6-ft. dia. wheel, much like the cutting chain on a chainsaw. It operates in reverse so that dirt is brought up toward the tractor. Most of the dirt is carried back into the trench so little backfilling is needed.

“Another advantage of this design is that it pushes rocks up and out of the way rather than down into the trench. If we do find a

rock too big for the machine to handle, there’s room to dig it out with a backhoe, without having to unhitch the tractor or take the cutter out of the trench,” he says.

The cutting teeth on the trenching chain are V-shaped, so the trench bottom is cut to that shape. “Our boot is V-shaped, too, so it slides right along in the trench. When the tile is laid into that trench, it’s more stable and soil fills in around it better than if it were laying in a flat bottomed trench,” Jay notes.

“The back of the machine is actually supported by the boot in the trench. We think this makes it easier for the laser to hold it on grade,” he says.

The Johnson and Hagberg machine can lay 4, 5 or 6-in. tile. “We can even lay waterlines with it,” Jay says. “As long as the diameter of the line is less than 6 in., it will feed down through the boot.”

Jay’s familiar with tile plows. “We had a tractor-mounted tile plow, but got rid of it because we had trouble pulling it, even when we were putting tile in at only 3 or 3 1/2 ft.,” he says. “Our machine can’t keep up with a tile plow when conditions are right for the plow, but we can hold grade better in any terrain and go up to 8 ft. deep with this in any condition, and we don’t need a 300 hp tractor to do it,” he says.

Contact: FARM SHOW Followup, Johnson and Hagberg Tiling, 32589 561st Ave., Lafayette, MN 56054 or Rt. 2, Box 55, Gibbon, MN 55721 (ph 507 228-8569 or 507 228-8320).



Tractor is fitted with “creeper” gears to run slow enough for tiler to cut a slot for plow shoe. It can be operated by a 170 hp. tractor, much smaller than other tilers.

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