

3-Pt. Pto-Driven Stump Grinder

A Maryland farmer who didn't want to spend the money for a commercial stump grinder built his own 3-pt., pto-driven stump grinder from scratch.

"It grinds stumps down to 6 in. below ground level and keeps soil disturbance to a minimum," says Robert Weer, of Goldsboro.

He used 1/4-in. thick, 3-in. sq. tubing to build a frame that supports the 20-in. dia. grinding wheel. A pair of 24-in. long, 3-in. dia. double acting hydraulic cylinders, one on each side of the frame, slide the grinding wheel back and forth over the stump as it grinds. The grinding wheel slides on mounting brackets that are lined with "slippery" 1/2-in. thick, 12-in. long nylon pads (made from household cutting boards). The 1,000 rpm pto shaft telescopes in or out with the grinding wheel.

"It will grind a 6-in. dia. stump down below ground level in only 5 minutes," says Weer. "To grind stumps bigger than 1 ft. in diameter, I make one pass, then move the tractor over 8 in. and repeat the process. I use a 90 hp tractor to operate it. I modeled it after a commercial model I had seen. The commercial model sells for \$4,500. I built mine for only about \$1,200. I had been using a bulldozer to remove stumps, but it left big holes in the ground. My grinder saves me a lot of money when



clearing land because our local tree grinding service charges \$40 per stump. I've used it to grind over 100 stumps so far."

The 20-in. grinding wheel is made from an 18-in. by 5/8-in. toothless sprocket fitted with 18 replaceable carbide tip bits. The toothless sprocket is equipped with a series of pockets lined up in pairs. The bits are held on by cap screws that go through slots between the pairs of pockets.

The 2-in. dia. pto driveshaft is equipped with relube bearings and protected by a shear bolt. The chip diverter shield over the grinding wheel can be removed without wrenches by rotating four cam-type levers. A piece of 4-in. dia. PVC protects the hydraulic cylinder on the output side of the cylinder.

Contact: FARM SHOW Followup, Robert Weer, 25250 Bridgetown Road, Goldsboro, Md. 21636 (ph410482-7237).



Modified Direct Seeding Air Drill

Bill McLaren, Maidstone, Sask., made his own modified direct-seeding air drill that he says works better than anything on the market.

"It's basically a 28-ft. 610 Deere cultivator with 8-in. spacing which is coupled to a 777 air seeder (manufactured in Saskatchewan by Flexi-Coil for Deere). Spring-loaded gauge wheels mount on back of each shank. Gangs of poly wheels on back were purchased from Valcon at Indian Head, Sask. (they're the makers and designers of the Conserva-Pak seeding system and are pioneers of directseeding in this region). I made up gangs of lightweight poly wheels and mounted them on back so they hang from old light duty cultivator shanks that apply about 50 lbs. per row packing pressure. These repack and reform the seed trenches from the front rows of shanks.

"I put granular nitrogen down with the front knife, and seed and liquid phosphate down with the rear knife. The liquid fertilizer is carried on the tractor in saddle tanks and pumped with a belt-driven centrifugal pump mounted on the pto. This is distributed through blue 1/4-in. lines and fed into seed tubes at frame height so seed is coated with fertilizer before it hits the bottom.

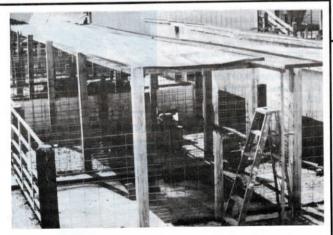
"Both knives are made by Dutch Industries in Regina, Sask. Front knife is a Dutch Thunderbolt with replaceable



chrome tips. My knives have seeded 1,150 acres and are like new. The rear knives are backswept with replaceable chrome tips. They're set 1 in. to the side and 1 1/2 in. above the fertilizer row.

"This system places seed accurately and clears trash well. I've direct-seeded everything for the past three years and coarse grains for five years."

Contact: FARM SHOW Followup, Bill McLaren, Box 403, Maidstone, Sask. SOM 1M0 Canada (ph 306 893-4751).



Elevated Sow Observation Walkway

Richard Ward built this elevated walkway over his outdoor farrowing pens as a way to safely observe and feed sows.

He made the 3-ft, wide walkway out of angle iron and expanded metal and mounted it on top of wood posts. He also set up a wood frame that supports a plastic "roof" in summer that provides shade. He can put it up or take it down from up on the observation walkway.

Contact: FARM SHOW Followup, Richard Ward, Rt. 6, Box 71, Crawfordsville, Ind. 47933 (ph 317 794-4321)

"No Hydraulics" Bale Unroller

"I came up with this bale unroller for the 3-pt. on an older model Ferguson tractor without external hydraulics," says Ray Faulkner, Bastian, Va.

The unroller has two arms that clamp onto the side of a round bale. The key feature is the hand-cranked 24-in. "ratchet binder" between the bale unroller arms that's used to clamp them down on the bale. Eye bolts on either end of the binder are cranked in or out by a ratchet lever at center that the operator cranks by hand.

The main cross bar on the bale handler is a 6-in. I-beam. Two pieces of 2 by 6-in. channel iron make up the arms. Two 1-in. dia. bolts are used as hinges. Bale unroller discs were made from trailing wheels off an old IHC side delivery rake. Faulkner welded 1 1/4-in. dia. pointed stub shafts to the hub caps on the wheels. The wheels turn freely so bales can be unrolled by pulling them along the ground.

"I've used this unroller for five years



with no problems," says Faulkner. "Everything used to build it was scrap metal except for the ratchet binder."

Contact: FARM SHOW Followup, Ray Faulkner, Rt. 1, Box 1780, Bastian, Va. 24314 (ph 703 688-4470).