

## Aerator Built Out Of Old Rotary Mower

British dairy farmer Mike Donovan, who farms in Wales, depends on his pastures to provide grazing in summer and haylage in winter. But compaction from heavy equipment and grazing cattle was hurting production so he decided to come up with a new way to rejuvenate the fields through aeration. He built an innovative 8-ft. machine out of an old Vicon rotary mower-conditioner.

Donovan says the basic idea would probably work with other mower-conditioners as well. "I removed the cutting bed entirely and both of the rubber conditioning rollers. I remounted the driven roller, which is a 6-sided bar made out of heavy material, across the base of the machine, reusing the bearing on one end but buying a new bearing for the other end of the roller, which was originally driven by the gearbox.

"I mounted 48 flat 7-in. long tempered steel tines on the roller, which I bought from a cultivator manufacturer. The tines are positioned in groups of 4 about 8 in. apart. Each group is fixed at a half angle to its neighbor so the tines look like they form a spiral.

"The base of each tine needed to be reshaped with an oxy cutter and then they were welded in place at a slight angle to make a slit in the soil slightly wider than the tine.

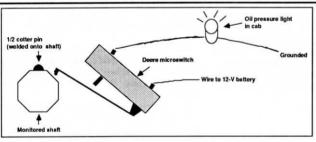
"I repositioned the drawbar in the center, reangling it so it sits higher on the



frame, and braced the frame with 2 by 2-in. box steel across the back and 2-in. flat plate steel for bracing. I also made some small skids to mount on each side. The high angle of the tongue pushes the tines downward when working. Extra weight is added under dry conditions. I plan to add a 40-gal. chemical drum to the top of the machine which I can fill with water.

"The tines go in about 5 in., leaving a neat slot about 5 in. long with the grass slightly raised around each hole. If I did it again I'd mount the tines with a slight toe-in towards center (no more than 15°) because that would make their action more vigorous without damaging the pasture. If the tines wear down, I can simply buy more and weld them onto the sides of the originals."

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## **Inexpensive Shaft Monitor**

"I made a grain drill shaft monitor using off-the-shelf components for less than \$100 that eliminates problems with skips," says Ross McGehee, Natchez, Miss., who says his home-built monitor would work on any rotating shaft and many other "out of sight" components such as round baler tailgates.

"My 3-section 28-ft. Crustbuster folding drill tends to throw off drive chains. My monitor lets me know if any of the three feed shafts under the seed boxes stop turning.

"I welded half a cotter pin to each shaft and then installed a microswitch alongside. The microswitches are standard off-the-shelf units from Deere that are normally used on Deere's combine straw walker monitor. As the shaft turns, it triggers the microswitch each time the switch passes over the cotter pin. The switch is wired to a bank of three lights on a panel in the cab - one light for each switch. The lights are simply oil pressure 'idiot' lights. Every time the shaft makes a revolution, it closes the circuit, blinking the light. If the light stops blinking, I know I've got a problem. Works day or night and is foolproof."

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Some of the best new products we hear about are "made it myself" innovations born in farmers' workshops. If you've got a new invention or favorite gadget you're proud of, we'd like to hear about it. Send along a photo or two, and a description of what it is and how it works. Is it being manufactured commercially? If so, where can interested farmers buy it? Are you looking for manufacturers, dealers or distributors? (Send to: FARM SHOW, Box 1029, Lakeville, Minn. 55044)

Harold M. Johnson, Editorial Director



## "Made It Myself" Pickup

By C.F. Marley

Clair Wilson, Hillview, Ill., decided that the best way to get a truly heavy-duty pickup was to build it himself. He did just that and he thinks he has a truck which will last him "forever".

It's a tow truck, dump truck and runabout truck and is designed to be easy to get into and out of.

"I started with a 1966 Chevrolet 3/4ton heavy-duty truck. What I have now is essentially a new truck from the ground up. I took it down to the bare frame, then reworked the bearings and the brakes. The 250 6-cyl, Chevy engine is in good working order," says Wilson.

He has heavy-duty cutting shears that can handle heavy steel and used them to make the jeep-like boxy cab out of 10-ga. steel that's almost 1/8-in. thick. Wilson also has a heavy-duty metal break which allowed him to mold the cab. He

also made removable doors out of the same heavy steel. The hood lifts from the back, giving him full and easy access to the engine.

The dump box was made out of an old wagon hoist designed to lift 10,000 lbs.

"Truck has a heater but the air conditioning is 260 - you roll down both windows and drive 60 mph."

There are three tanks and boxes behind the cab, positioned below the truck box. The one on the right side holds 28 gal. of gas. The middle tank is a reservoir for hydraulic oil. And what looks like a tank on the left side is actually a tool box.

Wheels are conventional with 16-in. rims. The truck weighs 5,400 lbs.

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