

## Mineral Feeder Doubles As Insecticide Applicator

"Our new ground level mineral feeder is designed to apply liquid insecticide as the animal eats. There's nothing else like it on the market," says Fred Mann, Mann Enterprises, Waterville, Kansas.

The Bowmaster is made from polyurethane and measures 3 ft. in diameter at the base with 13-in. high sides. It's divided into three compartments and has an overlapping rubber cover with a layer of felt fused to its bottom side. A 1-quart metal reservoir mounts on top of the cover and holds liquid insecticide, which wicks down from the reservoir to saturate the felt. As the animal sticks its nose

under the cover to get at the mineral, its head brushes against the felt and gets covered with insecticide.

"The animals can't get at the mineral without getting treated with insecticide," says Mann. "It works great on face flies and pink-eye, and does an acceptable job on horn flies, lice, and ticks. The feeder can hold up to 150 lbs. of mineral, lime, or other supplements.

"It works better than spraying insecticide onto cattle, which often doesn't last very long because rain washes it off. When cattle eat from our mineral feeder they're being treated with insecticide every day. The three com-



**Metal reservoir mounts on feeder's cover and holds liquid insecticide, which wicks down to saturate a layer of felt on cover's bottom side. As animal sticks its nose under cover to get at mineral, its head brushes against felt and gets covered with insecticide.**

partments allow you to feed up to three different types of minerals so cattle can consume what they like of each one."

Sells for \$298 and comes with 5 gal. of Prozap liquid insecticide. "The insecticide is ready to pour in and requires no mixing,"

notes Mann.

Contact: FARM SHOW Followup, Fred Mann, 222 East Front St., Waterville, Kansas 66548 (ph 785 363-2117; fbmann2300@sbcglobal.net; www.flykillercover.com).

## ROPS Protection For Older Tractors

If you own an older tractor without a rollover protective structure (ROPS), you can easily add to it with these new ROPS structures being imported from Australia by a California company.

Hercules E-Z Fit ROPS are designed for tractors made from 1939 to 1985 that weigh 7,000 lbs. or less. The structures fit imported Japanese tractors as well as most tractors made in the U.S. and Canada. They come equipped with a seat belt and mounting hardware. No special tools are required to install.

"As far as I know we're the only company that sells such a wide variety of after-market ROPS structures for small older tractors," says Ron DePue, Apple Valley, Calif. "Hercules has been making ROPS in Australia for a long time. About 1 1/2 years ago they started developing ROPS to meet OSHA and ASAE specifications for the North American market.

"In the U.S. and Canada, ROPS were optional equipment on all new tractors sold up until 1990. After that they became mandatory equipment by law, so all the tractor manufacturers started putting them on their tractors. However, tractor manufacturers quit making ROPS for their older tractors so they haven't been available in the U.S. for years."

He says the Ford 8N, Massey Ferguson 65, and all the imported Japanese brands like Yanmar and Kubota are popular candidates for add-on ROPS.

According to DePue, last year 255 people died in tractor rollovers in the U.S. And for every death there were 400 crippling injuries. "So many tractor owners never install a ROPS until someone gets killed. ROPS are cheap insurance because they save lives."

To save money some people build their own ROPS, but DePue says that's usually not a good idea, no matter how strong the struc-

tures are built. "A ROPS needs a certain amount of flexibility so that it can absorb the shock. Anyone can build a rigid structure, but usually when a tractor tips over it busts the housing because it doesn't give, and someone gets injured or killed."

He notes that in many areas there's a new incentive to buy a ROPS. "Many states have recently begun offering rebate programs if you retrofit an older tractor with a ROPS. New York has a 70 percent rebate program for anyone who buys a ROPS, and Virginia offers \$150."

They sell for \$480 to \$680 plus S&H, depending on tractor size.

Contact: FARM SHOW Followup, Ron DePue, 13580 Central Rd., Apple Valley, Calif. 92308 (ph 760 240-1062; fax 760 240-1126; sales@hstractor.com; www.hstractor.com).



**Hercules E-Z Fit ROPS are designed for tractors made from 1939 to 1985 that weigh 7,000 lbs. or less.**

## Industrial Equipment Repowered For The Farm

"I like to bring old equipment back to life," says Rodney Baker, Brainerd, Minn., who repowered an old road grader with a 6.2-liter diesel engine and a 3-speed automatic transmission out of a 1984 Chevrolet 3/4-ton pickup. It's equipped with a 12-ft. blade.

"I spent a total of less than \$1,000 and now have a perfectly good grader that I can use around the farm," he says.

Baker found the 1960's Adams grader setting in the woods with trees growing up through it. It had originally been used by a township in northern Minnesota. He already had the 6.2-liter diesel engine. He made a driveshaft to connect the 3-speed transmission to the grader's original 4-speed transmission which, with high and low gears, results in 10 forward speeds and six reverse.

He used sheet metal to make a new hood, and he modified the exhaust muffler to come out behind the cab.

"I use it to grade my mile-long driveway. It really works good," says Baker. "The entire project took about four weeks. It has a lot more power than the original engine. I paid \$500 for the grader, which included delivering it 100 miles to my house. The tires were worn out so I replaced them with ones off another grader.

"Installing the new engine and transmission was quite a job. I had to lengthen the frame by 14 in. I also added two coolers - one for transmission fluid and one for engine oil.

"Lining up the two transmissions was the hardest part of the job, because I couldn't get the engine low enough to line up the

input and output shafts. So I made a separate driveshaft that connects to a gearbox."

Baker rebuilt another piece of industrial equipment for use on the farm. He found an old Hough end loader at a junkyard and repowered it with a 350 cu. in. gas engine and turbo automatic transmission out of a 1987 Chevrolet 1/2-ton pickup. A homemade driveshaft connects the new transmission to the machine's original 3-speed transmission.

The machine rides on big 4-ft. high wheels and is equipped with a 4-in-1 bucket that can be used as a clam, grapple, or dozer blade. A snowblower powered by a Chevrolet 350 cc engine and 4-speed transmission can be quick-tached onto the bucket. The snowblower mounts on metal brackets that attach to the bucket with 1-in. dia. pins.

He lengthened the frame by 10 in. The new engine was lighter than the original one so he moved the counterweights farther back. The glass had been shot out so he installed new glass. He didn't want exhaust behind him whenever he turned around looking out the rear window so he installed a horizontal muffler.

"I use it to haul gravel and to maintain my driveway. I'm happy with how it turned out," says Baker. "I paid \$1,000 in a trade for the loader and \$700 in labor for the engine and transmission."

Contact: FARM SHOW Followup, Rodney Baker, 1426 Imm Drive, Brainerd, Minn. 56401 (ph 218 764-2464 or 218 838-7743; rmbbaktertoolman@yahoo.com).



**Rodney Baker repowered this old road grader with a 6.2-liter diesel engine and a 3-speed automatic transmission out of a 1984 Chevrolet 3/4-ton pickup.**



**He also repowered an old Hough end loader. A snowblower powered by a Chevrolet 350 cc engine and 4-speed transmission can be quick-tached to the bucket.**