**Parkes combined two 5-wheel Vicon wheel rakes into a single 10-wheel machine.**

## Home-Built Hay Rake Saves Him a Bundle

"Even if you cut most of your hay with a mower-conditioner, you still need a rake around once in a while," says Bruce Parkes, Eriksdale, Manitoba.

He wanted one big enough to get the job done fast. He had a couple of older 5-wheel Vicon wheel rakes, but they were worn and small. When he priced new rakes, he decided he couldn't justify the expense.

Rather than buying a rake, Parkes armed himself with his welder and a few pieces of new steel and combined the two old rakes into a single 10-wheel machine.

"We made just about everything except the raking wheels," he says. He patterned it after Vicon's newer 9-wheel rake.

First, he built a new frame from 4-in. square steel tubing. Then he added an arch of 3-in. square tubing. Finally, he made axles for the raking wheels and ground wheels from new 1 1/4-in. solid shafting.

"I machined out the hubs on the 10 rake wheels so I could fit them with ball bearings. Originally, they had needle bearings and we were constantly replacing them. The ball bearings were sealed, but we popped the inside seals out of them so we could grease them through the zerks in the wheels," he says.

Parkes put new-style Vicon springs on the rake wheels so they would float better. He also stripped off all the old rake teeth and replaced them with current style teeth. No modification was necessary to fit the new teeth to the old wheels.

The new rake has one rear transport wheel that he borrowed from a scrapped Versatile 103 swather. He salvaged two wheels that were the same size from an old harrow bar to serve as front transport wheels.

For lift, he put a 3-in. piece of angle iron on the side of the main frame and ran a 1-in. solid round shaft through that. There are chains from the shaft to the axle to lift it. He raises and lowers the raking bar using a hydraulic cylinder. He used a double action cylinder for the lift, but set it up as a single action cylinder by adding a oil reservoir made from a lawn mower gasoline tank to the retracting side of the cylinder.

Finally, he used 2 1/2-in. square tubing to make a tongue.

The rake picks up a swath about 18 ft. wide. "It works very well," he says. "We did have a little trouble with it wanting to walk sideways. We decided it was because the front transport wheels were taking some of the weight off of the rear wheel. We solved the problem by putting fluid in the tire and adding a couple of wheel weights over the top of it."

**He built a new frame from 4-in. sq. tubing.**

**Rake folds in for transport. Two wheels from an old harrow bar serve as front transport wheels.**

Parkes figures it cost him about $1,800 in new parts and steel to build the new rake in the spring of 1999.

Parkes says while both rakes work well, there are some things he might change. "On mine, I'd like to change the lift a little. We have to be careful when we pick it up because sometimes the rake teeth hook in the lift chains," he says. "We needed to make the knuckle at the back of the V-rake a little stronger. It folds and pivots at that point. We used 2-in. diameter heavy-walled pipe and 1 1/4-in. solid steel shaft to make it. The pipe and shaft were heavy enough, but we should have cut the pipe a little longer where we welded it to the rake frame. That would have given it more strength and put less stress on it when it flexed."

Contact: FARM SHOW Followup, Bruce Parkes, Box 151, Eriksdale, Manitoba R0C 0W0, Canada (Ph 204 739-2616).

**Once post is in the hole, Protector extends about 1 ft. above ground.**

## "Protector" Lengthens Life Of Pole Frame Posts

"Our new Post Protector prevents underground wooden posts used in post frame construction from rotting or being destroyed by insects," says Ken McDonnell, Pottsville, Pa.

The 5-ft. long poly unit is designed to be used on both pressure-treated and glue-laminated posts. Slip the Post Protector over the post and attach it using stainless steel lag screws and washers at designated locations on the protector. When inserted into the hole, the Protector extends about 1 ft. above the ground.

The Post Protector has built-in uplift protection ribs. When the post hole is backfilled with concrete, the concrete will grab the ribs and provide uplift protection to ensure the post won't be pulled up by strong winds.

"Continuous ventilation allows the post to breathe which also helps lengthen its life," notes McDonnell. The product is available in a wide range of sizes to accommodate the most widely used pressure-treated and glue-laminated posts.

**Poly unit slips over post and is held in place by stainless steel lag screws.**

Contact: FARM SHOW Followup, Post Protector, Box 187, Pottsville, Pa. 17901 (ph 877 966-7768 or 570 622-1918; fax 3700; Website: www.postprotector.com).

**"No pit" cattle guard consists of two aprons mounted inside a steel framework. Coil springs are housed inside 6-in. dia. steel posts on each side of guard.**

## Portable "No Pit" Cattle Guard

"It's virtually maintenance-free and can be quickly and easily moved to a new location," says Greg Hodnett of Arthur City, Texas, about his portable "no pit" cattle guard.

The unit consists of two aprons mounted inside a steel framework. The aprons are made from 2 3/8-in. dia. pipe spaced 3 in. apart. Coil springs mount inside 6-in. dia., 4-ft. high steel posts on each side of the guard. When a vehicle drives over the guard, it forces the aprons down. As soon as the vehicle's rear wheels leave the guard, the springs push the aprons back up.

"It's ideal for farmers who practice rotational grazing or who run their cattle on leased pastures. The guard lays flat on the ground so heavy trucks won't bend the pipes. Shocks attached to the coil springs keep the guard from popping up too fast once the vehicle has passed. It takes about 30 seconds for the floor to rise to its original height. It rises slow enough that if you pull a trailer across the cattle guard the hitch won't catch on the floor.

**When vehicle drives over guard, it forces aprons down. As vehicle's rear wheels leave guard, springs slowly raise aprons back up.**

"It requires about 1,000 lbs. to compress the floor. An ATV will just climb over the top of it." The guard is available in any width up to 16 ft. A 16-ft. model sells for $1,600.

Contact: FARM SHOW Followup, Greg Hodnett, Rt. 1, Box 150-1, Arthur City, Texas 75411 (ph 903 732-3846; E-mail: 2tcattleguard@net.com).