

## Grass Seed Harvester “Sweeps” Seed From Plants

Brothers Ray and Angus McDougald of Maple Creek, Sask., used a 1960's Massey 300 combine to build a wild grass seed harvester.

“Very few modifications are required on the Massey 300 because of the way the unit was designed,” Ray says. “The back end of the combine has a seam about 3 ft. up, where the threshing mechanism is. The body has a split right there, so it was easy to strip off the hopper and all the threshing mechanisms. Then, for strengthening, we bolted in a couple pieces of 4-in. channel iron.”

To keep the whole unit in balance, the McDougalds needed to replace the weight that was lost when they stripped the back end down. They did so by sliding a 110-gal. water tank in the bottom where the sieves were. It's multi-purpose, as it also provides a water source for fire fighting, if need be.

“When operating mechanical equipment, there's always a risk of fire, and we harvest this grass seed on large tracts of grazing land. If we had a problem, we could be 10 miles from any source of water.

Next, the brothers bolted an 8-ft. long pickup truck box on top of where the hopper and threshing mechanism had been. They added 4-ft. plywood sides to the box.

“The tailgate opens up so that when we're full, we can transfer the seed into a 3-ton truck, using a pitch fork or scoop shovel,” Ray explains.

Modifying the front end of the combine was pretty simple, too. The brothers removed the cutterbar and replaced it with a piece of 2 7/8-in. drill stem for reinforcement.

They removed the reel and, in its place, mounted a 28-in. dia. brush (with approximately 10-in. bristles) similar to a street sweeper brush, but not as dense. They had it custom made by a brush company in Calgary, Alberta.

“The bristles run about 1 in. above the drill stem,” Ray points out. Once the seed hits the brush, they go up the feederhouse and the cylinder shoots them into the box, just like if you were harvesting a cereal crop.”

The McDougalds harvest in pretty rough terrain (virgin ground that's never been broken up), so at times operating speed can be quite slow. However, on smoother, open country, their harvest speed is similar to that of most grain harvesting.

“With a 12-ft. header, it's a small enough combine that it's actually a nimble little outfit,” Ray points out. “Visibility is extremely good.”

The major expense was the brush, which cost approximately \$2,000. Everything else was salvaged.

The McDougalds harvest spear grasses such as “western porcupine” and “needle and thread”. They also harvest “rough fescue,” but it only sets seed about twice in a 10-year period, according to Ray.



**Brothers Ray and Angus McDougald converted a 1960's Massey 300 combine into this grass seed harvester, mounting a custom-built, 28-in. dia. brush on front.**

Seed harvesting doesn't hurt the existing grass stand because there's plenty of seed that doesn't get collected.

“We're lucky if we get a quarter of the total seed production because the heads of native grass plants don't mature all at the same time,” Ray explains. “We harvest in early July, before putting the cattle on it for a few weeks.”

The McDougalds wholesale their seed to retailers who blend them for reclamation projects across the southern prairies. They say

it's a limited and somewhat unpredictable market.

The brothers' grass seed harvester worked so well, they made another one from a Massey combine. Together with another seed harvester they bought, which mounts on the front of their tractor, they can cover a lot of acres.

Contact: FARM SHOW Followup, Ray McDougald, P. O. Box 1839, Maple Creek, Sask., Canada S0N 1N0 (ph/fax 306 662-2963; rmcDougald@sasktel.net).

## Electric Winch Automatically Raises Rolls Of Net Wrap

Net wrapped bales have become more popular in recent years. However, the rolls aren't easy to install in the baler. They typically weigh about 100 lbs. and have to be lifted 5 ft. off the ground into a storage compartment. This new remote-controlled lifting device, invented by an 81-year-old Manitoba farmer, solves the problem.

Elgin Routledge says he looked for a product to automatically lift net wrap rolls but couldn't find anything on the market.

“It lets one man lift a roll of net wrap in just a few seconds. All the operator does is push a button,” says Routledge. “I got the idea because two of my sons had back operations last year and had to find someone else to load rolls.”

The “Routledge Back Saver” consists of an electric winch that operates off the tractor's battery, and a pair of metal tongs that lift the roll. The tongs bolt onto a center-mounted

bracket that's connected to a length of cable. The operator uses a remote controlled switch to lift the roll up into the storage compartment. When the bale-wrapping roll starts to run out, the operator can use the winch to lower the next roll into place.

A round tube bolts onto the side of the baler and is used to store the remote control.

“It's an idea that should have been thought of years ago. I can't believe no company has offered anything like this before,” says Routledge. “It'll fit most brands of round balers. I'm now looking for a manufacturer. If you wanted to save money, you could wrap a pair of seat belts around the roll and attach them to the main bracket instead of using the tongs.”

“One company's net wrap rolls come factory equipped with hand holds, and I made a separate bracket for them that bolts on in place of the tongs.”

**Elgin Routledge wanted an easier way to lift net wrap rolls into balers. So he invented a remote-controlled lifting device that lets one man lift a roll of net wrap in just a few seconds.**



The kit comes with an overcenter locking device for increased safety, and with a metal bolt-on plate that protects the baler cover over the winch up too far.

Routledge is looking for a manufacturer.

He expects the kit to sell for less than \$400 (Canadian).

Contact: FARM SHOW Followup, Elgin Routledge, P.O. Box 2339, Virden, Manitoba, Canada R0M 2C0 (ph 204 748-3368; routledge@mts.net).

## A New Class Of Trailer Locks

Locking a trailer with a chain and padlock is only a little better than no lock at all. A bolt cutter or even a good blow with a hammer is often all it takes, and your trailer is gone. When Ken Gustafson had a chained-up trailer stolen, he started thinking about alternatives. Today he has three locks patented and more on the way. He is marketing them under the name Gus Hill Industries.

“The first one I came out with was DaPlug for lunette ring or pintle hitch trailers,” says Gustafson. “Since then I've introduced DaKing for kingpin-type trailers and DaBull for Bulldog-type hitches. All three are designed to fully encase the hitch and protect the lock.”

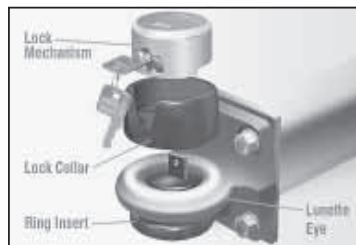
Gustafson points out that a thief can cut through a padlock in seconds and tow a trailer away. By putting a lock into the hitch and

encasing it, it is virtually impossible for a thief to hook up and drive away.

“We've done trials with our locks, telling a welder to use whatever tools he could,” says Gustafson. “After he gets set up, it still takes 12 1/2 minutes to cut through one of our locks.”

DaPlug consists of three pieces. The ring insert fits inside the lunette ring from the bottom. It mates with the lock collar, which slips into the top of the lunette ring. The lock mechanism fits inside the cast iron lock collar, protecting the mechanism from tampering. It comes in two models, one for 2 3/8-in. rings and one for 3-in. rings and sells for \$69.95.

DaKing comes in two pieces, the hitch collar and the lock. The cast aluminum collar fully encases the hitch. The locking mecha-



**“DaPlug” trailer lock (left) is designed for lunette ring or pintle hitch trailers. “DaBull” (right) is designed for Bulldog-type hitches. Both fully encase the hitch to protect the lock.**

nism covers 210 degrees of the kingpin. It's priced at \$139.95.

The DaBull model includes the tongue that locks the coupler, the sleeve that mates with the tongue and covers the coupler, and the lock. It is available for 2-in. trailer balls and

for 2 5/16-in. trailer balls. It's priced at \$129.95.

Contact: FARM SHOW Followup, Gus Hill Industries, P.O. Box 1298, Jackson, Calif. 95642 (ph 209 304-5591; info@daplug.com; www.trailerlocksonline.com).

