#### "WORKS AS GOOD AS A \$20,000 RIG"

# Old Combine Converted Into Hybrid Windrower

"I've cut tangled up hay that other machines couldn't get through," says Iowa farmer Dean Ouverson, of Clear Lake, about the 14 ft. wide hybrid windrower he made by mounting the reel and crimper from a self-propelled Owatonna 350 windrower on a stripped-down 1967 Massey Ferguson 510 combine.

Ouverson, who does custom cutting of hay and oats, says his Owatonna windrower, equipped with a 4-cyl. Ford engine, "never had enough power to cut down hay. When the engine blew up, I decided I didn't want to spend the money for a new windrower. By marrying up the old one with an old 510 Massey, I ended with a hybrid windrower that works as good or better than a \$20,000 rig."

Ouverson widened the combine's chassis 8 in., allowing him to tuck the Owatonna crimper under the frame's center. He also installed canvas from the Owatonna reel. Otherwise, the revamped rig is all combine.

The combine's cab and engine were originally mounted side by side. Ouverson used a cutting torch to center the cab over the frame. He dismantled the combine, removing the cylinder, straw walkers, con-

caves and other internal parts. He then moved the engine to the rear, behind the cab, and salvaged a newer and sturdier real from another combine, shortening it 2 ft.

"The combine's variable speed hydraulic transmission drives the reel. Reel speed is independent of ground speed and can be varied from the cab," says Ouverson. "When I get into down or tangled hay, I can slow ground speed and speed up the reel for faster cutting action," Ouverson points out. "The original windrower was pto-powered and everything shook to pieces. I had to replace wobble box drive ends on it every 50 acres. In contrast, I cut 450 acres with this hybrid rig this past year and never had to replace any of the drive parts."

Ouverson moves a lever in the cab to raise and lower the belt-powered crimper. When he switches from hay to oats, he can raise the crimper high enough so that oats go under it.

"Switching between oats and hay was a big job with the old windrower," says Ouverson. "I had to put the crimper on and take it off. To remove it, I had to block up the machine, remove bolts and belts, then set it down and drive away. Hooking it back



Revamped rig is "all combine" except for added-on canvass andOwatonna reel.

up was even more of a job."

Thanks to the 105 hp Chevy V-8 engine, Ouverson can cut hay at 6 to 7 mph, and "up to 10 acres per hour in good going. This rig isn't quite as maneuverable as a self-propelled windrower, but plenty good. With a steering wheel, it's a lot easier to drive than stick steering.

"My new hybrid windrower uses about 3/4 gal. of gas per acre. I don't run the engine as fast as I did on the combine because I don't need as much power," ex-

plains Ouverson. "If I were to build another rig like this, I'd use a Massey 410 combine with a Chevy 292 engine. It would probably get by on a 1/2 gal. of gas per acre."

Ouverson plans to add a few "finishing touches" to his hybrid windrower, including air conditioning and a metal hood over the engine "to dress it up."

For more information, contact: FARM SHOW Followup, Dean Ouverson, Rt. 3, Box 252, Clear Lake, Iowa 50428 (ph 515 797-2716).



All-aluminum "stripper" (12-ft. wide) weighs only 750 lbs. and is light enough for use with 50 to 60 hp. tractors.

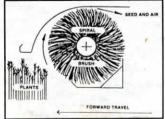
### SELECTIVELY HARVESTS ONLY MATURE, HIGH PURITY SEED

## Revolutionary New Grass Seed "Stripper"

A new rotary brush "stripper" which attaches to a tractor front end loader and selectively harvests only mature seed is revolutionizing grass seed harvesting, says Weldon Miller, president of Ag-Renewal Inc., Weatherford, Okl., the manufacturer-marketer. "It allows you to harvest high quality, high purity seed — without the hit and miss guesswork of harvesting with a conventional combine."

The new Woodward Flail-Vac replaces the bucket on your tractor's front end loader. It takes a 12 ft. swath and is equipped with a 21 in. dia. cylindrical nylon brush which, operating at 300 to 600 rpms, strips mature seed off standing plants.

"Unlike a combine sickle, which cuts plants off and harvests everything — including green seeds in varying stages of maturity, plus a lot of sticks and trash — the 'Stripper' harvests only ripe seed and leaves the plant intact, allowing later-maturing seed to ripen on the standing plant," explains Miller. "Most owners generally go through fields 4 and 5 times over a 3 to 5



Nylon brush strips seed from plant and creates sufficient air flow to convey seed to rear storage hopper.

week period, depending on weather conditions, to strip off seed as it matures.

"Operating field speed is generally between 6 to 9 mph. The brush turns with an upward motion, just opposite that of a combine reel, to strip seed off erect-standing plants with virtually no shatter loss. It's not uncommon for farmers to bring seed with 90% or higher purity right out of the field on each pass, compared to only 25 to 40% purity with a combine. Combines can

#### **Fast New Test For Grass Seed Purity**

"It takes the guesswork out of grass seed harvesting, cleaning and marketing," says Ag-Renewal Inc. of its fast, accurate new way to test all type of chaffy grass seed for purity.

Called the Air-Seed Shucker, the new device uses air from your existing air compressor (40 to 90 psi) to strip chaff from grain and to then dehull the remaining seed kernels.

You only need a small 5 gram sample and it only takes 3 minutes to run the test which gives you the percent of pure seed in the sample," says Weldon Miller, president of Ag-Renewal Inc.

Dehulling the seed, explains Miller, is the "secret" to the new tester's speed and accuracy. "We think it's a must for every farmer who harvests grass seed, for seed companies, and for ASCS and SCS specialists charged with determining quality of seed being planted to grass under the CRP program. It tells you when to starting harvesting, or whether a given field is even worth harvesting. During harvest-



ing and cleaning, it tells you how to adjust equipment to maintain optimum quality. And, when planting, buying or selling grass seed, it eliminates virtually all questions related to purity of the sample being bought, sold or planted," Miller points out.

The new tester sells for right at \$1,000. Contact: FARM SHOW Follow-

up, Ag-Renewal Inc., 1710 Airport Road, Weatherford, Okl. 73096 (ph 405 772-7059).

cover more acres but they're generally not nearly as productive when you figure total net pounds of pure seed harvested from a field," says Miller.

The new Woodward Flail-Vac, invented by Aaron Beisel, an Oklahoma farmer, has been field tested for five years throughout the entire U.S. The latest new 12 ft. wide production model is all-aluminum and weighs only 750 lbs. "It's light enough so you can use it with tractors as small as 50 to 60 hp.," notes Miller. "This makes the machine especially popular with custom grass seed harvesters. Instead of having to move big combines from farm to farm, all they need is a small trailer to carry a smaller tractor equipped with a loader and our new aluminum Flail-Vac."

Its nylon cylindrical brush, made up of

7.5 in. long bristles spiraled onto the cylinder, is powered by a completely independent, pto-driven hydraulic system. You use the tractor's hydraulic system to raise and lower the loader to match operating height of the Flail-Vac with height of the crop being harvested. The machine has a built-in hopper which self-empties into a truck or wagon simply by raising the loader.

The 12-ft. wide Flail-Vac sells for \$10,000, including the independent hydraulic system. A smaller 6 ft. wide model, designed primarily for small fields and research plots, sells for \$7,000, including hydraulics.

For more information, contact: FARM SHOW Followup, Ag-Renewal Inc., 1710 Airport Road, Weatherford, Okl. 73096 (ph 405 772-7059).