



"It's unbelievable how much faster and easier it moves through even the heaviest crop," says Stewart of his modified swather.

"MACHINE OF THE FUTURE" CUTS HAY DRYING TIME BY 30 TO 75%

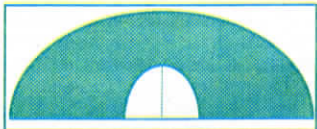
Modified Swather Makes Tunnel Inside Windrow

"It's the swather of the future," says Bob Stewart, a Zillah, Wash., custom hay harvester who has come up with a tunnel-making windrow modification that he says cuts drying time in hay and small grain crops by 30 to 75%.

Stewart modified shields around the conditioner rollers at the back of the cutterhead on his 12-ft. wide self-propelled New Holland 912 swather. Hay comes off the rollers in a rounded, rain-shedding windrow that's got a 6-in. dia. tunnel at its center.

"It lets hay dry from the inside. As the hay wilts, sun shines through it and into the tunnel. I've let windrows stand for 8 or 9 days and, even after a rain, the tunnel holds up. If you flip the windrow after a week, you can still see the indent of the tunnel in the upside down windrow," explains Stewart. The rounded shape of the windrow also helps promote faster drying since it sheds rain, unlike conventional flat windrows.

The tunnel-making modification, which Stewart says could be done to any swather or mower conditioner, is just one of several changes Stewart made to his machine. He also added 4 extra bats to his 4-bat reel, replaced the sickle bar with a double-bladed knife, speeded up the cutterbar, and



A 6-in. dia. aeration tunnel is formed at center of wet hay windrow by swather.

added extra paddles to the feeder auger. "If you feed hay more smoothly into the machine, you get less slugs in the windrow. The more even the windrow, the faster it dries," notes Stewart. He says the original 4-bat reel on the swather bunches hay against the knives while the 8-bat reel pulls hay off the knives faster to prevent plugging. The double-bladed knife - it has 3-in. sections with 2 points - and increased cutting speed help the machine handle the increased flow of material.

"It's unbelievable how much faster and easier this machine moves through even the heaviest hay crop. It makes extremely smooth, even windrows," says Stewart, who'd like to license his swather innovations to a manufacturer.

For more information, contact: FARM SHOW Followup, Bob Stewart, Rt. 2, Box 2552, Zillah, Wash. 98953 (ph 509 829-5783).



"Tunnel-making modification could be done to most any make of swather," says Stewart.



Hamilton can vary operating speed of his swather-mounted auger.

Self-Propelled Augers

It takes two men to move most big grain augers around. At harvest time that often means someone has to come in from the field to help out. Two Canadian farmers, who got tired of the hassle of handling augers, came up with different solutions to the same problem in building their own self-propelled augers.

Swather-Mounted

When Lloyd Hamilton bought an old self-propelled Cockshutt swather at a sale near his Cymric, Sask., farm, he planned to take the 35-hp. Wisconsin engine out of the machine and junk the rest. After the swather sat around the yard for a while, though, he got a different idea.

Why not mount his big 8-in. dia., 60-ft. auger on the swather and forget trying to wrestle it around between grain bins?

"The auger was always a problem because it took two people to move. When we were busy it could really slow us up," says

Hamilton who reworked the swather into a permanent auger transport.

An electric winch raises and lowers the top end of the auger while a hydraulic cylinder raises and lowers the back end. Hamilton replaced the variable speed drive units on the front of the swather with orbit motors and used the variable speed drive, along with a set of belts, to power the formerly pto-driven auger. The steering gear from an old Minneapolis Moline tractor is used to control the rig. He powers the lifting winch with a reversible 12-volt motor. The top end of the auger can be raised to a height of about 30 ft.

Hamilton says one of the best things about the auger is the variable speed, which lets him slow it up when not running at full capacity, and the big 35-hp. engine. "It always has enough power," he notes.

Contact: FARM SHOW Followup, Lloyd C. Hamilton, Box 12, Cymric, Sask. SOG 0Z0 Canada (ph 306 484-4627).



Heller added dual wheels to give the tractor more stability.

Tractor-Mounted

Oscar Heller, Southey, Sask., permanently mounted his 10-in. dia., 50-ft. auger on an old Case "500" diesel tractor.

Heller says he figured he could afford to tie up a tractor with the auger because he moves a lot of grain each year and also because, he says, there are so many old tractors around you can pick them up for a couple hundred dollars.

To mount the auger, Heller built a sliding frame at the front of the tractor on two masts that run straight up from either side of the tractor. A pair of hydraulic cylinders slide the auger up and down on the masts as needed, reaching a maximum height of about 25 ft. The rear of the auger can also

be raised up and down with a single hydraulic cylinder attached to a single support fastened to the frame at the back of the tractor. Heller moved the auger's pto gearbox about 6 ft. up toward the center of the auger to help balance it out, and runs an extended pto shaft from the tractor to the gearbox to power it.

When Heller first mounted the big auger on the tractor 2 years ago, it was equipped with singles on the rear. Because of high winds that are common in the area, he decided to equip the tractor with duals for added stability.

Contact: FARM SHOW Followup, Oscar Heller, Rt. 1, Box 21, Southey, Sask. SOG 4P0 Canada (ph 306 746-4304).