

FILLS MACHINE TO CAPACITY

Straight Cut Header On Forage Harvester

By Janis Schole

When custom forage harvester Dan Prefontaine got frustrated with his inability to go fast enough for optimum profitability, he decided to try something unconventional. What resulted is something that he believes is a one-of-a-kind unit.

The 10-year veteran of the silage business mounted a 25-ft. Honey Bee header on his New Holland FX45 self-propelled forage harvester. He built all the brackets and mounting mechanisms for it himself, including an adapter plate on the header. He also had to modify the feeding auger and drive clutches.

"Since the header was designed for grain, it had to be beefed up to handle the much wetter forage," Prefontaine explains. "I used the feed auger out of a Field Queen forage harvester and, as a drive clutch for the header auger, I used the feeder house clutch out of a 751 Massey combine."

At the time we interviewed him this year, he had already harvested 4,000 acres with

the first-of-its-kind harvester and everything was running smoothly.

"To do this, your forage harvester must have 4-WD and be heavily weighted on the back end. I used the manufacturer's weights and specifications so that the rear weights equal the weight of the header. Also, a good braking system is crucial," he says. "You have to blow the silage into a wagon behind the forage harvester because the header is too wide and interferes with a truck. A braking mechanism must be built into the wagon so it can't push you down the hill when loaded.

"Setting up a straight cut header on a forage harvester isn't simple, but once it's working, it's a wonderful piece of equipment," he says.

Prefontaine uses an electric-operated air brake system to control the 15-ton Jiffy "accumulator box" he pulls behind his harvester. It unloads on-the-go into tandem axle trucks. Load time to fill a truck is a mere 35 seconds if there's enough feed in the wagon.



Custom forage harvester Dan Prefontaine mounted a 25-ft. Honey Bee header on his New Holland FX45 self-propelled forage harvester. Silage is blown into a 15-ton Jiffy "accumulator box" which unloads on-the-go into tandem axle trucks.

His ground speed on light crops is up to 7 mph and he has cut heavier 6 to 7-ton crops at 5 to 6 mph. Prefontaine says his modified forage harvester has dramatically increased his volume per day and the durability of the machine.

"I never pick up dirt or rocks and went from sharpening the knives every 4 hours to every 15 to 18 hours. There's 90 per cent less wear on the knives," he says.

Prefontaine recently harvested some 7-ft. tall clover in eastern Saskatchewan using his system. He had no trouble and says this

height of clover is not uncommon in that part of the province.

When he placed an ad in the paper, looking for work for his straight cut forage harvester unit, he had 20 to 25 calls from other custom harvesters curious about how he had made the modifications. Prefontaine says he may consider converting systems for others as an added service.

For more information, contact: FARM SHOW Followup, Dan Prefontaine, Box 2137, Moose Jaw, Sask., Canada, S6H 7T2 (ph 306 692-7899).

Add-On Engine Drives Pto On 4-WD Tractor

A lot of big, older 4-WD tractors aren't equipped with pto's. Gary Lantz, Augusta, Ill., corrected that situation on his 1979 Versatile 875 4-WD tractor by mounting a Chevy 350 cu. in. gas engine between the tractor's rear wheels. The engine shaft-drives a drop box with a self-contained clutch pack off a 1970's Case 1200 4-WD tractor. A small hydraulic cylinder, driven off tractor hydraulics and connected to a steel arm, engages the clutch pack to turn the pto on or off.

Inventions are nothing new for Lantz, who invented the Seed Jet bulk seed handler now sold by Yetter Mfg., Colchester, Ill.

Lantz turns a key inside the cab to start the add-on engine and uses the engine throttle to control the pto's speed. A beer keg bolted onto the auger wagon he pulls with the tractor serves as a 15-gal. gas tank for the engine, which is equipped with an electronic fuel pump.

"I use the tractor to pull my big 1,000-bu. Killbros auger wagon," says Lantz. "The wagon was too big for my 2-WD tractor and has an 18-in. dia. auger so there was no way I could use a hydraulic motor to operate it. At first I installed a 2-cyl. Deutz diesel engine and used it to operate a 470 bu. auger wagon equipped with a 10-in. dia. auger. However, that engine had barely enough power to operate the pto so when I bought the 1,000-bu. wagon I converted to the Chevy engine. It has about 150 to 170 horsepower.

"When Versatile tractors were first sold they could be equipped with an optional pto. However, it really made the tractor complicated because to install it the transmission had to come out so that a shaft could be run through it to the clutch. It was hard to service and actually reduced the tractor's resale value.

"The Chevy engine came with a governor and its speed happened to be just right for turning the pto at 1,000 rpm's. I used the Case tractor's drop box because it had its own clutch pack, which allows me to turn the drop box on or off independent of the engine. The cylinder that operates the clutch pack is off a



Gary Lantz wanted to use his 1979 Versatile 875 4-WD tractor to operate his 1,000-bu. Killbros auger wagon. The tractor didn't have a pto, so he mounted a Chevy 350 cu. in. gas engine between the tractor's rear wheels.



Beer keg bolted to auger wagon serves as a 15-gal. gas tank for the add-on engine.

fertilizer spinner spreader."

Lantz ran hoses from the tractor's water-cooled diesel engine back to the add-on gas engine in order to keep it cool. "In cold weather I can start the add-on engine first in order to warm up the diesel engine before I start it. It'll warm the tractor engine up to about 160 degrees."

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Engine shaft-drives a drop box with a self-contained clutch pack off a 1970's Case 4-WD tractor. A hydraulic cylinder engages the clutch pack to turn the pto on or off.