



Nifty Way To Build High-Capacity Sprayer

"When I got the opportunity to buy an old 420 Versatile combine, I considered several different conversion projects and finally decided to make a field sprayer out of it," says Jay Rose, Willow City, N. Dak.

"First I stripped it to the frame. I used the grain tank and unloading auger to make a 4-ton feed hopper that is used in my cattle operation. The other extra parts were sold.

"Then I moved the Chrysler 318 V-8 engine down and back, almost over the rear steering wheels, realigning the variable speed sheaves and drive belts. The next step was to remount the control platform just ahead of the engine. All control cables, brake lines, electrical wiring, hydraulic lines, and fuel lines were shortened and reattached.

"A curved 350-gal. poly tank (Summers Mfg. Co., Maddock, N. Dak.) was mounted between the front drive wheels. The water pump for the sprayer has an electromagnetic clutch that runs off the V-8 engine. I modified a 45-ft. pickup spray boom by adding 3 ft. to the center section to clear the combine wheels. I added a platform to stand on when filling

the tank.

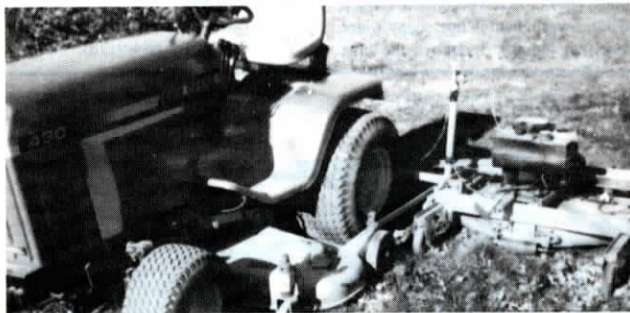
"I installed a Micro Trak 3000 spray monitor that includes a speedometer, flowmeter servo-valve, pressure gauge, three electric solenoids to control booms, and one solenoid for agitation in the tank. The control panel can be programmed for desired gallons per acre and miles per hour. If mph changes, the monitor compensates pressure and maintains gallons per acre.

"I use an Adja foam marker to prevent misses and overlaps. With 6 exterior lights, I can spray at night to avoid strong daytime winds.

"Four air filters on top of the 12-ft. cab provide fresh air and good visibility. Wheel tracks are much less than a 3/4-ton pickup and the sprayer performs better in soft ground than a 4-WD.

"This is the second season for my home-built sprayer and it's worked very well. It's got all the features of new sprayers on the market but with the added bonus of being self-propelled. Total cost to build was \$3,000."

Contact: FARM SHOW Followup, Jay Rose, Rt. 1, Box 121, Willow City, N. Dak. 58384 (ph 701 228-3338).



"Extension Deck" For Riding Lawn Mower

Ronald Schultz, Truman, Minn., mounted the 38-in. wide deck from a junked-out riding lawn mower on the left side of his 5-ft. wide Deere 430 diesel riding lawn mower, providing more than 8 ft. of total cutting width.

Schultz used angle iron to build a frame that supports the "extension deck" as well as an 8 hp electric start gas engine. A bracket connects the "extension deck" to the riding mower's deck and drawbar.

"I built it last fall because I didn't want to spend a lot of time mowing," says Schultz. "It cuts all the grass on turns and is handy for mowing ditches and under trees with low branches."

A wire connects the electric start gas

engine to the riding mower's battery. Schultz mounted the starter button and throttle on a steel upright so he can reach them right from the seat of the mower.

The engine, which Schultz bought new, is bolted to the top of the add-on deck. Schultz uses a spring-loaded clutch to tighten the belt on the extension mower. One brace runs from the gauge wheel bracket to the riding mower's deck, and another brace connects the extension deck to the riding mower's drawbar.

The front wheels of the extension deck are stationary while the rear wheels caster. Contact: FARM SHOW Followup, Ronald Schultz, Rt. 2, Box 217, Truman, Minn. 56088-9625 (ph 507 776-3766).



IH Combine Makes Great Crop Sprayer

A Nebraska farmer who couldn't find a row crop sprayer with enough capacity to fit his needs says his new 65-ft. wide self-propelled "combine sprayer" covers acres fast.

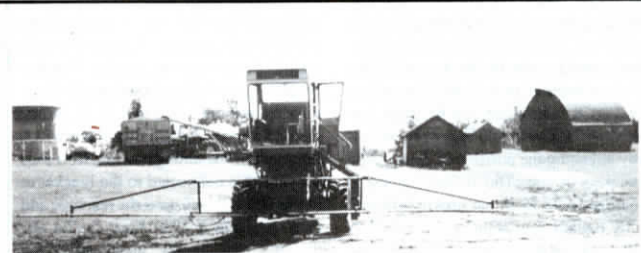
Robert Breinig, of Holdrege, stripped away everything but the engine, front axle, and cab from a 1976 International 915 combine. He used 15-in. structural steel to build a chassis that supports a 1,250-gal. tank mounted behind the cab and a 3-section Modern Flow boom in front. He replaced the original front tires with new 11.6 by 24 tires and mounted 11.6 by 38 tractor tires on back. He replaced the original rear axle with the rear steering axle from an International 1680 combine. The sprayer is powered by the combine's 414 cu. in. engine.

"I had been using a pickup-mounted sprayer, but I needed more capacity and wider booms because I got tired of stopping to refill every 15 minutes," says Breinig, a custom applicator. "On a good day I can spray 250 to 300 acres at 6 1/2 mph. At 10 gallons per acre I can go 120 acres without refilling. Visibility from the cab is excellent. Because the sprayer has the combine's hydrostatic transmission, I can operate at variable speeds for

different rates of application. I paid \$3,400 for the combine and spent a total of \$25,000 to build the sprayer, which is more than I planned on, but still only about half the price of a new sprayer of comparable size."

Breinig built the 15-ft. center section of the sprayer from 4-in. sq. box wall tubing and the 25-ft. wings from 2-in. square tubing. The nozzles on the boom are set up on 20-in. spacing. A Raven 440 spray monitor controls the flow. The boom sections are independently controlled from the cab by solenoid valves. A pair of hydraulic cylinders raises and lowers the entire boom, and another pair of cylinders raises the wings for use on hillsides and for transport. In transport the wings fold back beside the combine for a total road width of 12 ft. When the wheels are turned so that the concave center discs face inward, the sprayer is 108 in. wide and can straddle three 36-in. rows. By flipping the tires around the sprayer can be widened to 120 in. to straddle four 30-in. rows.

Contact: FARM SHOW Followup, Robert Breinig, 1610 West Ave., Holdrege, Nebraska 68949 (ph 308 995-6871).



Sprayer Built From Combine

William Stephaniuk, Wishart, Saskatchewan, turned a 1968 New Holland 980 combine into a self-propelled sprayer equipped with a 50-ft. boom that offers great visibility and covers acres fast.

Stephaniuk stripped away everything but the 100 hp Ford 6-cyl. engine, axles, and cab. He mounted a 500-gal. tank behind the cab in place of the grain tank and a 200-gal. tank in place of the straw walkers and sieves. He replaced the header with a 2-section boom.

"I didn't have to change much on the combine and only had to modify the sprayer slightly so it attached to the combine," says Stephaniuk. "Sprayer controls are in the cab. The sprayer pump is powered by the variable fan drive.

"I used it to spray 400 acres on my farm

last year. On a good day I can spray 30 acres an hour at 6 mph. The combine's variable transmission lets me operate at variable speeds for different rates of application. It works great for spraying weed patches. I can slow down to 2 1/2 mph in heavy weeds or speed up to 7 mph where weed infestations are light. Since the cab sits high above the booms, I have great visibility and avoid chemical odors."

The boom is raised and lowered from the cab by the feederhouse hydraulic cylinders. It's hinged in two places and can be manually folded against the sides of the combine.

Contact: FARM SHOW Followup, William Stephaniuk, Box 166, Wishart, Saskatchewan, Canada S0A 4R0 (ph 306 576-2204).