



Sprayer is equipped with a 90-ft. boom with flexible tubing along it for two separate spraying systems.



Sprayer's three-section folding boom is covered by a windshield made from corrugated plastic tile.

“Wind-Proof” Sprayer Features A Divided 800-Gal. Tank

Wiley Juedeman, a Geraldine, Montana small grain grower, was looking for a better crop sprayer when he ran across the frame from an old dry fertilizer spreader.

The engine and automatic transmission were intact, and the old spreader had two steerable axles. “The tanks and all the fertilizer handling parts had been stripped off, but the rest of it was in good shape,” he says. “We had a couple of old tanks to mount on it. And we added a wind shield over the boom, so we could spray in light winds.”

A few years before, Juedeman had made a wind shield for another sprayer using 3-ft. diameter corrugated plastic tile and, though there had been some problems with it, he figured he could correct those in his new design.

On the front of the frame, he hung a 90-ft. boom made of 4-in. square steel tubing. Then he ran flexible tubing along the boom for two separate spraying systems, with two separate sets of nozzles. “We use one for broadleaf herbicides and the other for our wild oat

control,” he says.

The boom was actually salvaged from his old sprayer, which he also made himself. It’s put together in three sections. The center section is 10 ft. wide, to allow it to go through gates and travel on rural roads. Attached to both ends of this section are two 40-ft. long sections that fold backward hydraulically. The hydraulic cylinders that fold the boom have an adjustable relief valve that allows the pressure to flow off if the boom hits something.

“We added small floater wheels to the ends of the folding sections when we put it on the truck,” he says. “They don’t run on the ground normally, but they will keep the boom from hitting the ground and protect the wind shield in uneven terrain. That was the problem with the wind shield on the old sprayer - it kept hitting the ground and breaking.”

To mount both 500-gal. tanks on the spreader frame, they had to cut the end out of one and size it down to 300 gal., and then

welded the ends of the two together. “That gives us a 500-gal. and a 300-gal. compartment. We use the larger one for broadleaf spray and the other for wild oat herbicide,” he says.

Juedeman turned the plastic tile into a wind shield by splitting it in half lengthwise. That left him with a protected chamber 18 in. deep at the peak of the arc, and 3 ft. wide from front to back. He mounted this on the 4-in. boom with U-bolts, spacing them about 8 ft. apart along the boom. “I had a local spring shop make some light 2-in. wide single-leaf springs to fit under the plastic tube halves. To fasten the windshield, I put the U-bolts over the boom and then through the tube with the spring underneath,” he explains.

The springs not only support the windshield, but also give it some flexibility. Since the corrugated tile came in 40-ft. lengths, he used only one section for the two folding segments of the boom. Then he cut a 10-ft. piece from another length of culvert to make the center section.

Juedeman says having two spray tanks and delivery lines is handy for spot control of wild oats. “We can flip on the pump for the wild oat spray as we drive into a wild oat patch and spray both broadleaf and wild oat controls at the same time.”

At first, he used hydraulically driven spray pumps on the rig, but since oil flow was dependent on engine speed, pressure wasn’t as consistent as he wanted. “We mounted an 8 hp gasoline engine on the sprayer to power both solution pumps. It holds pressure regardless of how fast the truck engine is running, so we get more consistent application,” he says.

They usually run the sprayer about 14 mph in the field. Juedeman figures they can operate safely with a maximum wind speed of about 15 mph.

The sprayer cost about \$4,000. “That doesn’t count our labor,” he says.

Contact: FARM SHOW Followup, Wiley Juedeman, Box 276, Geraldine, Montana 59446 (ph 406 737-4461).

Rolling Step Ladder

A home-built “rolling” step ladder makes it easy for Louie Waelti to wash equipment and do other chores on his farm.

The Monroe, Wis., farmer made the one-of-a-kind step ladder mostly out of 1/2-in. pipe. The step ladder rides on a pair of 3-ft. high steel rake wheels (tines removed, of course) and is equipped with a platform that’s about 5 ft. off the ground. He rolls the step ladder up to his equipment and uses a spray wand connected to a pressure washer to do the cleaning work.

“It moves around like a big wheelbarrow. Because of the big wheels I can push it right through mud and snow with no problem,” notes Waelti.

The wheels mount on an axle made from a length of pipe. Cotter keys are used to join both ends of the pipe to the wheel hubs. The 2-ft. sq. platform is made from lengths of 1-in. flat iron set on their edges and spaced 1 in. apart. A 3 1/2-ft. high railing made from 1-in. pipe surrounds three sides of the platform. The steps are made from expanded metal. A pair of long handles with hand grips

extend about 1 ft. past the steps.

The expanded metal steps are bolted onto lengths of angle iron that are welded horizontally onto the sides.

“It’s one of the handiest things on my farm. I’ve also used it to paint equipment and buildings, to build a garage, trim trees, and to replace light bulbs in my shop,” says Waelti. “I can carry a paint pail up with me and set it on the platform or hang onto it. It’s stable enough that I can even use a chain saw on it, which I couldn’t do with an ordinary stepladder. The front part of the railing has a hinged step attached to it that I can stand on to reach even higher. The step folds up out of the way when it’s not needed.”

Waelti says his rolling stepladder didn’t cost much to build. “I already had the rake wheels and got the expanded metal that I used to make the steps free from a local welder. I bought the pipe for the axle and railing new.”

Contact: FARM SHOW Followup, Louie Waelti, N3337 Aeby Rd., Monroe, Wis. 53566 (ph 608 325-6385).



Waelti rolls step ladder up to his equipment and uses a spray wand to clean it.

Do Friends & Neighbors Borrow Your FARM SHOW?

You probably don’t mind sharing your copies of FARM SHOW with friends, neighbors, relatives or co-workers, but wouldn’t it be nice if they all had their own subscriptions? Now you can “gift” a year of FARM SHOW to anyone and renew your own subscription at a cut-rate price. See enclosed order form or call 1-800-834-9665 to order by credit card.