A 1 in. steel pipe sown into the bottom holds the nylon cover down close to the ground.

Photos courtesy Country Guide

APPLIES ROUNDUP IN WINDS UP TO 35 MPH — WITHOUT DRIFT

Wind Doesn't Bother Hooded Sprayer

"We custom apply Roundup in winds up to 35 miles per hour — without any worry whatsoever about spray drift damage to adjacent crops," says Dwight Roll, manager of the Farmer's Union Oil Co. of Roseau, Minn., who, along with several co-workers, designed low-cost hoods for their custom sprayers.

"Without the hood, we were having to pull out of fields any time wind velocity got over 10 mph. Now, we seldom have to stop spraying because of wind problems. We've tested this hooded concept for three years. We know it works," Roll told FARM SHOW. The Co-Op has two "hooded" custom sprayers — one with a 64 ft. boom, and the other a 57 ft. boom.

Roll speculates that most any type of sprayer — whether pull type, tractor mounted, pickup mounted or whatever — can be "hooded" if the booms are equipped with gauge wheels. There's really no limit on boom length so long as there are gauge wheels to maintain a uniform boom height on all types of terrain. Our total cost for cover material and a few miscellaneous items was less than $300 per sprayer.

Here's how Dave Wilkins, writing in Country Guide magazine, describes construction of the "hood":

"The cover material is heavily reinforced nylon. The cover itself is attached to the boom in front of and just below the boom pipe. When the sprayer is in use, the 6 ft. wide cover is pulled up over the boom supports, and the strap iron and rebar supports, and then draped down almost to the ground behind the boom. To prevent it blowing upward, 1 in. pipe is sown into the bottom close to the ground. The interior width of the hood is roughly 2 in.

"Forward of the boom pipe, the cover is bolted to a piece of 1 in. angle iron welded to the main frame. Also attached to the angle iron is a 4 in. wide piece of flat iron. To this is bolted a piece of heavy rubber belting which hangs down to just above the ground. The stiff belting resists the push of crop and weeds as the sprayer moves through a field.

"Telescoping stabilizer bars about 25.5 ft. long run from each end of the main boom frame to the front bumper of the truck when the sprayer is in use. A piece of 3 in. by 2 in. angle iron was welded to the bottom of each side of the bumper. To each was attached a 1⅞ in. trailer ball hitch. The stabilizer bars attach to the ball hitches with regular couplers. There's a safety wire on each bar, too.

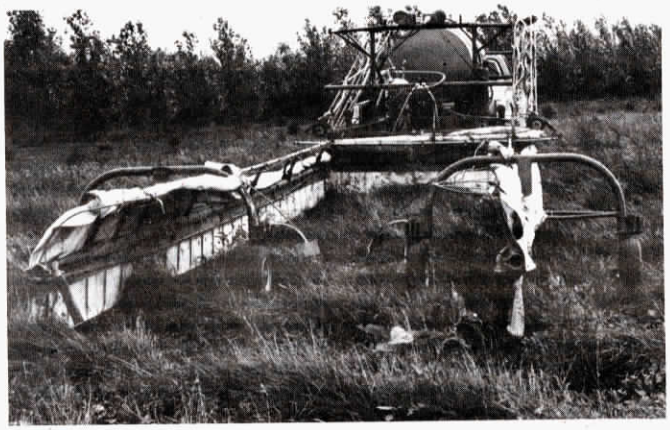
"There are 2 pairs of wheels, one at each end of the boom. Attached to the rear wheel of each pair is a fender made of 2 in. wide flat iron fashioned in a T-shape and extending back from the wheel. The cover is run over the fenders to keep it from hitting the wheels when the sprayer is in use.

"A 500 gal. fiberglass spray tank is mounted in the truck box and three ¾ in. hoses run back to the sprayer boom. The sprayer is run at 35 to 40 psi pressure, about 5 to 10 psi higher than normal. An 8 hp. centrifugal sprayer pump is used to ensure a high application rate and good tank agitation. The sprayer is pulled at about 5 to 7 mph and has been used in crops up to 12 in. tall. It has a gas motor-driven foam marker system.

"When operating, the spray swirls inside the hood and saturates the plants. For transport, the two end sections of the boom fold back against a smaller middle section permanently attached to a thick tubular steel bumper which was added to the back of the truck."

Roll notes that several local farmers have designed their own hooded sprayers, all patterned after the Co-Op's two prototypes. "We've equipped our units with low cost monitors which let the operator know if a nozzle plugs. We use flood jet nozzles spaced 40 in. apart on one rig, and Tee Jet nozzles spaced 20 in. on the other. One advantage with the flood jets is that the droplets are bigger, to further reduce drift, and there is more overlap, which makes plugging less of a problem when it occurs."

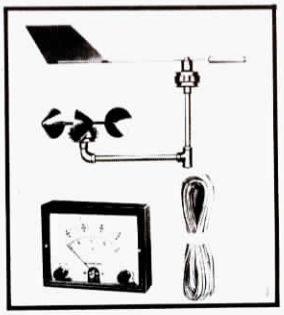
For more do-it-yourself details, contact: FARM SHOW Followup, Dwight Roll, Manager, Farmer's Union Oil Co., Roseau, Minn. (ph 218 463-1805).



A piece of stiff rubber belting (lower left on folded boom) resists the push of the crop as the sprayer moves through the field.

Wind Speed Indicators

"It's one of the best buys we've ever made — eliminates having to guess how fast the wind is blowing," says Minnesota custom sprayer Dwight Roll of the wind speed indicator which the company he manages — Farmer's Union Oil, of Rosseau — uses to pinpoint wind direction and velocity.



The "Windscope", purchased from the Ben Meadows Co., Atlanta, Ga., sells for $315. It mounts on top of a pole or building and comes with 60 ft. of lead-in wire to the 6½ by 5 in. control unit which, by flipping a 2 position knob, gives an instant, direct reading of both wind speed and direction.

The Ben Meadows Co. also offers a hand-held wind speed and direction indicator which resembles a compass (Model 110982). It reads a 5 mph breeze, or a 70 mph gale directly on its big dial. Fully self-contained, it requires no batteries and no external wiring. Measures 7.5 in. high and sells for $44.95.

If you're interested in a low cost indicator which measures wind speed only, Meadows offers the hand-held Wind Meter (Model 110950) for $8.95. It has no complicated mechanism or calculations to bother with. To operate, simply remove the Wind Meter from its clear plastic case and hold at eye level with the back of the unit to the wind. The position of a white ball in the tube indicates wind speed in miles per hour.

For more details, contact: Ben Meadows Co., 3589 Broad St., P.O. Box 80549, Atlanta (Chamblee), Ga. 30366 (ph toll free 1-800-241-6401, or 404 455-0907).