



Mobile unit contains two toilets, sink, towel and soap dispensers, and a 300-gal. fresh water tank.

## COMPLIES WITH NEW FEDERAL LAW

# Mobile Field Toilet

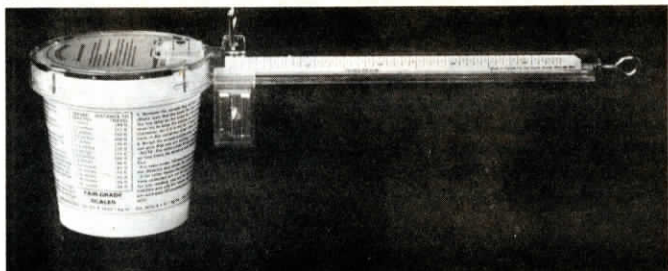
"We first built one five years ago for our field workers. Then Oregon passed a field sanitation law and neighbors started asking if we could build one for them," says Paul Serres, Woodburn, Ore., whose field sanitation wagon complies with Oregon's law as well as a recently passed Federal law requiring sanitation facilities close by field workers at all times.

The mobile unit contains two sanitary toilets, a large stainless steel sink, towel and soap dispensers, waste basket, and a 300 gal. stainless steel fresh water tank. Everything's mounted on a two-wheel trailer chassis equipped with over-the-road lights and electric brakes. The entire rig is 16 ft. long and 8 ft. wide. Weighs 4,400 lbs. with a full load of fresh water.

"The law says you've got to make facilities available anytime you've got more than 15 workers in the field, and that the facilities can not be more than 3 min. away from the workers at any time. This unit complies with both Oregon law and the new Federal law," Serres told FARM SHOW.

Sells for \$4,300. A single toilet unit is also available for \$3,100. It's narrow enough to pull down the row directly to the workers.

For more information, contact: FARM SHOW Followup, Paul Serres, Black Acre Hop Farms Inc., 11283 Serres Lane N.E., Woodburn, Ore. 97071 (ph 503 981-6098).



Easy-to-use calibrator works on any drill and any crop.

## ALSO SETS FERTILIZER RATES

# Simple New Way To Calibrate Seed Drills

"Setting rates on most seed drills and air seeders is a hit or miss business at best," says Jim McDowell, a Bay Tree, Alberta, farmer-manufacturer who's come up with a new calibrator scale that makes it easy to set application rates on any kind of seed drill, air seeder or granular applicator.

You simply attach a collection bag to one run on the drill and drive a fixed distance. Then weigh the sample taken and the scale will tell you directly the pounds per acre being applied. No mathematical calculations required. McDowell says the first time you calibrate, you should check each run to find out which runs put out the average amount of seed - because some will drop more and some less - and thereafter check just the average runs to

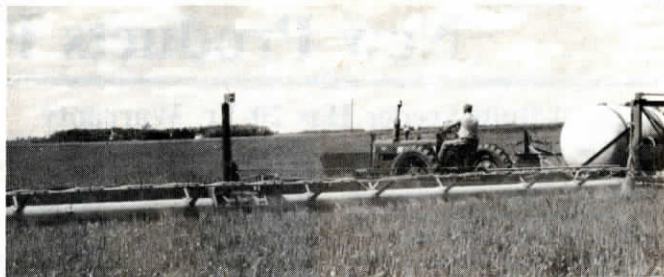
monitor seed rate. After setting the drill accurately a few times you can just use the rate scale for occasional checks. Takes less than 15 min. to conduct a thorough test. The procedure is the same for fertilizer applicator checks.

"Works on most any machine with any seed. Best of all, there are no electronics to go wrong," says McDowell.

Made from high-impact plastic, the rate scale sells for \$31.80.

For more information, contact: FARM SHOW Followup, J & L Marketing, 5665 Eudora St., Commerce City, Colo. 80022 (ph 303 288-2641).

In Canada, contact: FARM SHOW Followup, Jim McDowell, Box 855, Bay Tree, Alberta T0H 0A0 Canada (ph 403 353-3783)



Auger tube (8 in. in dia.) pushes crop over. Spray nozzles are on second boom 20 in. above and behind auger tube.

## 72-FT. RIG SPRAYS IN STANDING GRAIN

# Spray Boom Built From 8-In. Auger Tube

A Minnesota farmer boosted his wheat yields by 20 bu. per acre with a home-built "auger tube" sprayer that's designed to travel through a standing crop with minimal damage.

Norman Gorder, who farms near Gary, has practised intensive small-grain management in his wheat and barley crops since 1982. Most farmers use crop dusters to apply the extra fungicides and growth regulators needed during the growing season because most sprayers cause too much damage to growing crops. His \$4,000 home-built sprayer damages only about 2% of the crop, a loss he says he more than makes up for in increased profits. Gorder figures he saves nearly \$20 per acre over the cost of aerially applied chemicals.

Key feature of the in-crop sprayer is the 8-in. auger tubing boom that runs the full 72-ft. width of the sprayer. "The auger tube pushes the crop over, opening up the leaf canopy to permit spray mist to cover the lower leaves of the wheat or barley. Spray nozzles are mounted on a second boom located 20 in. above and behind the auger tube. When spraying, the round boom first contacts the grain and bends it forward. An opening forms just behind the boom and under the nozzles where the spray mist comes down. As the boom passes, the grain waves back and forth in the spray mist so the entire plant is covered," explains Gorder, adding that research has shown it's necessary to spray lower leaves as well as upper leaves to most effectively reduce disease toxins that can hurt yields.

The big auger boom adjusts up and down hydraulically to match crop height. Nozzles can be set anywhere from 16 in. off the ground to 72 in. "Nozzles should be at least 12 to 14 in. above the top of

the crop," notes Gorder.

A unique feature of the auger boom is that the sprayer's 500 gal. spray tank can be filled from either side through a hose threaded down the length of the auger boom, making it possible to refill from the side of the field with minimal crop damage. The sprayer is fitted with a pair of 9.5 by 36 wheels off a "C" IH tractor while the 460 IH tractor used to pull the sprayer is fitted with a pair of matching width 9.5 by 42 tires modified to mount on 38-in. wheels. Tractor and sprayer tires run in the same tramline track, eliminating one row of grain on each side. The castor wheels at either end of the spray boom wipe out a total of one row together since they run half in the row and half between the rows. So for each pass of the 72-ft. wide sprayer (144 rows), 2 rows are eliminated. Gorder follows the tramlines for each of the several trips he makes over the field each season. Operation of the sprayer, pulled by the IH 460, runs about 1 gal. of gas per 10 acres. Working alone, he can cover several hundred acres a day.

Gorder fitted the underside of the IH tractor with a metal "belly pan" to push the crop down and out of the way. Row dividers on the wheels also minimize damage. For transport, boom folds back to trail behind spray caddy.

Working closely with his county agent and a university researcher, Gorder worked out application rates of fungicides and Cerone growth regulators, as well as higher rates of nitrogen and herbicides. They have measured 20 to 23 bu. per acre increases in wheat (from 45 to 65 bu/a) and similar yield increases in barley.

For more increases, contact: FARM SHOW Followup, Norman Gorder, Gary, Minn. 56545 (ph 218 356-8248).



"Belly pan" on underside of tractor pushes crop down and out of the way.