

Planter/Cultivator is set up for 12 22-in. rows but will handle wide variety of other row spacings.

### AIR-CONTROLLED TOOLBAR RUNS THROUGH CENTER OF MACHINE

## New Self-Propelled Planter/Cultivator

Would you hesitate if you had the chance to pick up a 60 hp tractor, a precision cultivator, and a planter — all combined into a self-propelled planter-cultivator for \$2,500.

With a little help from Bruce Viker, Halstad, Minn., and some labor on your part, you could build one for that price. Viker did, in fact, he's built two such machines himself and has put them to rugged use on his 1,500 acre Red River Valley farm.

Outstanding features — such as air-controlled cultivation pressure which "floats cultivators through fields," and a segmented, independently controlled toolbar built right into the center of the machine — make this a unique do-it-yourself machine.

It's made from a conglomeration of parts, including a "slant-6" 225 cu. in. Dodge engine and the differential and transmission from a 1957 Massey "80" combine. "We were developing the machine with features that don't exist on any tractor, such as a 132 in. wheel base," says Vicker. "Basically, we started from scratch."

The self-propelled planter-cultivator he designed has power comparable to a 60 hp. tractor. "That's important in itself," Viker points out. "You can't buy mid-size tractors anymore and we use huge tractors to do little jobs because we don't have any choice. But I think it's ridiculous to wear out a \$30,000 tractor for things like cultivating sugarbeets."

Planter units and the interchangeable cultivator shanks ride on row gang units in front of the drive wheels, below and a little ahead of the driver's seat. The driver never has to turn to look at equipment behind him.

"You're right on top of the action, and that's important with beets," says Viker. The two machines he built are set up for 12 22-in. rows, but could have been built for any other sizes.

Viker designed the machine's system that "floats" cultivators through the ground with downward air pressure. "It lets you adjust to ground conditions," he says. "To dig deeper in hard ground, you just up the pressure." He uses a small electric compressor, about the size used on adjustable automotive shock absorbers, to get the job done.

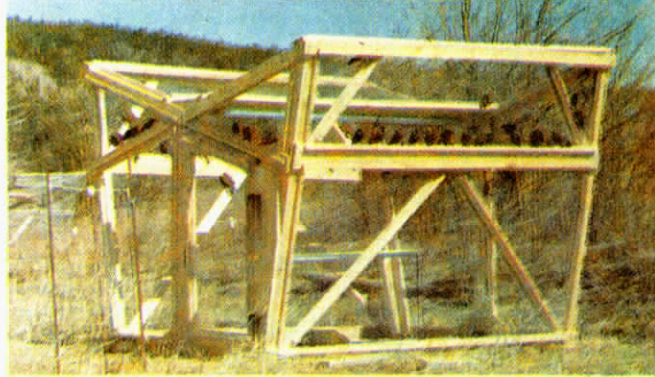
While air pressure is used for downward pressure, hydraulic pressure is used in the same cylinders to lift the row gang units out of the ground. They move up and back, like the fold in a child's swing.

Another feature of the planter-cultivator is the short changeover from cultivation to planting. Just four bolts for every two rows to remove the shanks and mount the Nodet planting units.

The precision of Viker's machine is also important to him, especially when working beets. The toolbar is rigidly bolted to the machine and goes wherever the machine goes. As a guide, he uses rear-mounted cone discs that dig a groove when planting, and are followed by mono-ribbed front tires when cultivating.

Unlike most wide-front tractors, the rear wheels on Viker's machine are spaced 44 in. wider than the front wheels. "We did that to make sure the guiding grooves remain clear and distinct."

The planter-cultivator's gas tank is made of special rubber and mounted up front over the wheels. "That was



Most states require a permit for trapping blackbirds, but not for "pest" birds, such as sparrows, starlings or pigeons.

### DECOYS AND FOOD ATTRACT PEST BIRDS

## Birds Caught Live In New-Style Trap

Latest new weapon for controlling pest bird populations in fields or feedlots is the new "live-trap" system out of an area of Canada that loses thousands of dollars of grain per year to growing bird populations.

"Farmers have caught up to 2,000 birds live in three months using just one trap," Richard L. Demeester, Granville Ferry, Nova Scotia, inventor of the Wings Inn System, told FARM SHOW.

An entrance grate in the top of the "V"-shaped trap is just large enough for birds to slip through. Once in, perches located near the outward-leaning walls keep the birds away from the grates, where they could escape.

The pest birds are lured in by live decoys, and a generous supply of grain and water. "It's important that decoys are the smallest species being trapped so that other birds aren't scared off, and that there is always lots of food and water to keep the birds inside the cage happy," says Demeester.

The birds are so content in the cage that, when released, they usually come back. Naturalists who have used the trap for banding birds have had to take the birds 10 miles away to lose them. Otherwise, they'll keep coming back, says Demeester.

Earle DeMerchant, a New Brunswick area crop specialist with the Canadian Department of Agriculture, promotes use of the trap and notes that many area farmers lost up to 75% of their corn crop from blackbirds in

1977. In the spring of 1978, he monitored 15 traps which caught 22,000 birds in less than eight weeks.

"Personally, I gave the Wings Inn System much credit for a substantial reduction in the amount of bird damage to crops. Twenty-two thousand birds is 11,000 pair, each of which could have six to eight young. Therefore, in theory, we kept some 80,000 birds off the crops," says DeMerchant.

He recommends the system be used during spring and summer because birds are in residence and there is less food available. In early fall, when huge flocks migrate, traps are less effective but flocks generally don't stay long either, says Demeester. And later in the fall when corn would still typically be in the field, traps will still be on the job.

The trap is set up at least 200 ft. from trees and buildings, in a conspicuous area between watering marshes, and roosting and feeding grounds, to catch birds traveling to eat or drink.

The traps also work well around barns or bunker silos or any infested area, says Demeester. Most any grain can be used for bait. Each trap holds hundreds of birds. To kill them, one user puts the birds in a burlap bag and holds it over a car exhaust. A Wings Inn trap costs about \$200 in kit form. Dealer inquires welcome.

For more details, contact: FARM SHOW Followup, Richard L. Demeester, Rt., 2, Granville Ferry, Nova Scotia, BOS 1K0 (ph 902 532-5982).

the only place left to put it," says Viker.

An extra benefit Viker didn't expect is energy efficiency. Traveling 6 to 7 mph for most operations, he used about 2½ gal. per hour, or about 12 to 13 acres per 2½ gal. He attributes that to the machine's ability to float equipment through the ground.

Viker says the machine could be used in most any row crop although

he has no plans to develop it commercially himself. It cost him about \$2,500 to build, not counting his labor.

He'll share his design with anyone interested, although he'd prefer to be contacted by phone, not written.

For more information, call: Bruce Viker, Halstad, Minn. (ph 701 457-2201).