

## NO PIT TO DIG OR CONCRETE TO POUR

# Drive-Over Guard Pops Up For Cattle

You don't have to dig a pit, pour concrete or install heavy grills to keep cattle in if you make use of the new "pop-up" portable cattle guard from Cross Machinery and Manufacturing, Mindenmines, Mo.

"It's possible to drive through this guard at 20 mph without stopping or slowing down. It'll soon pay for itself in time saved by not having to open and close gates, and by not having to build expensive pits. And, there are no load limits on the gates," says Duane Cross, manufacturer.

The spring-loaded guard is made from  $\frac{1}{8}$  and  $\frac{1}{4}$  in. interlocking spring steel, shaped in a grid pattern 12 by 13 ft. in size. A set of springs fastened in a steel "cradle" holds the guard in a bowed configuration when no weight is present. When a truck, tractor or person crosses over it, it quickly slips down flat to the ground. Once the weight passes, it pops back up to its 15 to 18-in. height.

"The height is adjustable by tightening the springs. Also, two lightweight stays hold the guard in place between gate posts. But, after a few uses, it tends to wear a small groove for itself and doesn't move out of place," explains Cross.



Guard flattens out so tractors, trucks and cars can drive over it without stopping.

He adds that the guard is portable and can be moved temporarily to remote swinging gate areas during special operations, such as haying or harvest when lots of vehicles have to be moved through.

The 12 by 13 ft. cattle guard sells for \$375. Other sizes can be special-built.

For more information, contact: FARM SHOW Followup, Cross Machinery and Manufacturing, Box 92, Mindenmines, Mo. 64769 (ph 417 842-3405).



The 40 ft. swather switches from field to transport in two minutes.

## ELIMINATES ONE MAN AND ONE MACHINE

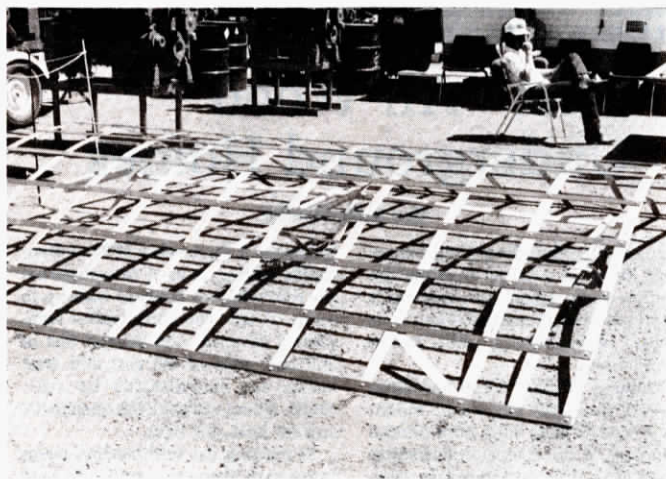
# All-Hydraulic Swather Takes 40 ft. Cut

Canadian farmer Ron Mitchell, of Bracken, Sask., eliminated one man and one machine by combining two pull type swathers into a single 40 ft., all-hydraulic pull type unit which he fabricated in his own farm shop.

Starting with two 20 ft. junked Versatile swathers, he built the entire unit from scratch in his farm shop.

This past winter, he built a similar swather which takes a 45 instead of a 40 ft. swath.

The original 40 ft. swather hinges in the middle for flotation. Although he used worn out Versatile swathers, Mitchell notes that most any make or model 20 ft. swathers could be merged into a 40 ft. unit. Grain from



Cattle won't challenge new guard's 15 to 18 in. height.

## MOUNTS ON PICKUP

# Hydraulic Soil Sampler

"There was nothing that would do the job quickly and easily," says John Doty of Carlyle, Sask., who solved his soil sampling problems with his own shop-built pickup-mounted core sampler.

The soil sampler consists of a 28-in., 1 $\frac{1}{2}$ -in. hydraulic pusher cylinder that drives a core sampler into the earth. Once the sample is taken, you just unpin the sampler probe from the end of the cylinder and push the sample out with a rod and into the desired container.

The sampler is designed to mount at the rear of a pickup, clamping between the bumper and the pickup with the tailgate off. It's powered by a 12-V electric hydraulic pump, which comes with the unit, or by a pto-driven pump. It's not designed for tractor 3-pts.

"It takes about 10 to 15 sec. to drive the probe in for each sample. We take one 2-ft. core from each five acres in every farm field and send the core samples to the soils laboratory to be analyzed for the amount of fertilizer needed. We used to get a man from the local elevator with a hand-cranked unit that took longer and cost more," Doty told FARM SHOW.



Taking a 2 ft. core sample is quick and easy with truck-mounted sampler.

Doty is manufacturing the new sampler with the help of his son Mark. It sells for \$698. For more information, contact: FARM SHOW Followup, Doty Enterprises, Box 202, Carlyle, Sask. SOC ORO (ph 306 453-6013).

both halves is delivered to the center and combined into a single swath. The canvases on each side are split into independently operating 10 ft. sections to divide up the weight load of the grain.

All operations of the swather (except height control of the reels and sickles, which is tied into the tractor's hydraulic system) are controlled by a 4 stage hydraulic pump which is powered by the tractor's pto.

The operator, right from the tractor seat, can vary speed of the sickles, reels, canvases, and ground speed as well as height of the hydraulically-

driven drive wheel on the outer end of the swather which eliminates side draft and also serves as a gauge wheel for maintaining a uniform cutting height across the full table, regardless of terrain.

In only 2 or 3 minutes, the operator can switch from field to transport position, or vice versa. Transport width is about 15 ft. Field operating speed is right at 6 mph.

"Please tell your readers not to write to me for information since I don't have any printed up blueprints or instructions of any kind to send them," Kennedy told FARM SHOW.