

Three electric grids are mounted in openings on either side of enclosure. Flies enter grids trying to get out of chute and are instantly killed.

ELECTRIC GRIDS ZAP FLIES AS COWS WALK THROUGH CHUTE

First-Of-Its-Kind Electric Fly Trap

"It kills a large percentage of flies instantly with no labor required at all," says Thomas W. Moreland, research manager at the University of Maryland College of Agriculture about a first-of-its-kind electric fly trap.

The university, along with the USDA Agriculture Research Service, designed the trap which consists of an 8-ft. long, 3 ft. wide, 5 ft. high polyurethane enclosure that's painted white and is open on both ends. Three rows of plastic strips hang down inside to brush flies off the cow as she walks through the trap. Three electric grids are mounted in openings on either side of the enclosure. Flies enter the grids trying to get out of the trap and are instantly killed.

"You just set it up and forget about it," says Moreland. "Power for the grids comes from a 110-volt electrical outlet or a solar panel. The grids have small openings and work on high voltage but low wattage. Flies literally explode when they get zapped so they don't stick to the grids. Many flies that go out the open end of the chute eventually come back through the grids and are killed. They're attracted by the chute's bright white color or by the sound of flies circulating inside the trap.

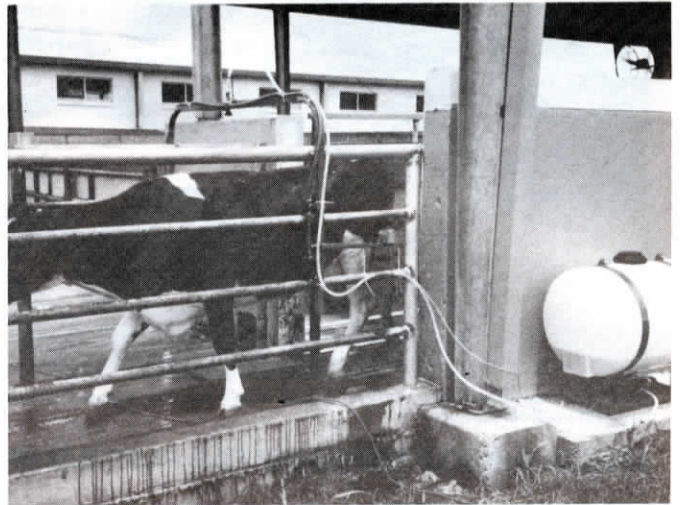
"The inside of the trap is lined with wire panels so cows can't touch the grids. The

trap can be used to kill flies even without cows going through it by placing it close to a barn. Lights inside the chute are on a timer and come on for about two hours during the evening and early morning to attract flies.

"We tested it extensively last summer and often saw dead flies 2 in. thick on the ground. We noticed that cows spent more time out on pasture during hot days and stayed much cleaner than in past years because they weren't being bothered by flies. It almost completely eradicated horn flies from a group of heifers maintained on pasture and greatly reduced stable flies when placed near the entrance of their housing barn. We found that it works best when placed between pastures or between a holding area and a feeding or watering area because it forces the cattle to pass through on a daily basis. The chute has a metal frame with hinges on it for gates that funnel cows into the trap."

Moreland says a manufacturer has shown interest in the trap and may have it on the market by this summer.

Contact: FARM SHOW Followup, University of Maryland College of Agriculture, 4240 Folly Quarter Road, Ellicott City, Md. 21042 (ph 301 596-9550).



Steel arch mounts outside barn and is equipped with five nozzles - two on each side and one on top.

ELECTRONIC EYE AUTOMATICALLY SPRAYS COW AS SHE LEAVES BARN

"Liquid Fly Swatter"

"Our new 'liquid fly swatter' automatically sprays dairy cows with insecticide as they leave the barn. It's much more effective than conventional fly control devices because it covers the entire cow with insecticide and never misses an animal," says Dwayne Yoder, Yoder's Enterprise, LaRussell, Mo.

A steel arch mounts outside the barn and is equipped with five nozzles - two on each side and one on top. As the cow passes through an existing walkway and under the arch, an electronic eye senses her presence, triggering a fine mist of insecticide.

"It works better than diesel oilers or dust bags which often just cover the top of the cow's back. There's no need to corral the cows and there are no moving parts to spook them. It eliminates the danger of milk contamination caused by conventional spraying which drenches cows," says Yoder.

The electronic eye automatically starts and stops an electric motor-driven pump. Insecticide volume is regulated by the size of the nozzle tips. The arch comes with mounting brackets that can be mounted on concrete block walls, steel pipes, or board fences. Telescopic sections let you adjust width and height to accommodate almost



As cow passes under arch, an electronic eye senses her presence, triggering a fine mist of insecticide.

any existing exitway. A 3/8-in. dia. hose runs from the arch to the chemical tank and pump that can be placed up to 100 ft. away. Tank available in 12, 30, or 55-gal. sizes.

Complete system with a 12-gal. tank sells for under \$649.

Plans for a mineral feeder/sprayer for beef cattle are being developed.

Contact: FARM SHOW Followup, Yoder's Enterprise & Mfg., Rt. 1, Box 181, LaRussell, Mo. 64848 (ph 417 246-5202).



Van Den Brink made forklift out of two junked Deere 45 combines and other parts.

Farmer-Built Forklift

"I made this forklift in 1989 using two junked Deere 45 combines, a Century forklift mast, a hydrostatic valve bought at an auction, various other valves and cylinders for tilt and side shift, and miscellaneous scrap metal," says Alvin Van Den Brink, Fennville, Mich.

"I built the frame out of 6-in. I-beam and 3-in. angle iron and narrowed up the drive axle on the right side. The operator's platform is positioned close above the transmission and drive axle. The radiator is mounted at the rear and is cooled with a VW electric radiator fan. I speeded up the hydraulic pump for the mast and added another pump for steering, mounting header lift cylinders on the steering axle.

"The completed forklift is 10 ft. long, 6 ft.

wide and it's 7 ft. high to the top of the steering wheel. It'll carry loads of up to 2,400 lbs. with no trouble at all. My out-of-pocket cost was only about \$1,250 and a year of spare time. That includes two new pistons in the engine, rings and sleeves, and ringing the valves. I didn't use any plans or patterns. Just built it as I went along. You don't need a fancy shop to take on this kind of project. All that's necessary is a good welder, a cutting torch, grinder, a drill and a set of hand tools. I never would have had a piece of equipment like this if I hadn't built it myself."

Contact: FARM SHOW Followup, Alvin Van Den Brink, 6740 120th Ave., Fennville, Mich. 49408 (ph 616 543-4403).