Dairy Curtain Catches Manure, Urine

When New Zealand dairy farmer Didar Bains got into trouble with his daughter because she objected to his practice of docking dairy cows' tails, he never dreamed it would lead to the start of a new sideline business.

In trying to find a way to catch manure and urine and keep it out of the way of the tails, he came up with a new "sluice curtain" with the help of ag engineer John Pretty. It worked out so well in his own milking parlor, he decided to market it.

Essentially, it's a vinyl sheet with a fold at the bottom that catches the waste. Designed for any herringbone or rotary parlor, it hangs from the bar behind the cow and can be easily hosed out at the end of each milking. A bungy cord is threaded along one edge of the curtain, allowing the cow's rump to "mold" itself into the curtain. Bains says nearly all manure and urine is caught and that very seldom does any get into the pit. He's used the curtain for a year.

Sells for about $40 per yard.

Contact: FARM SHOW Followup, Didar Bains, DJ Curtain, Ohaupo, New Zealand (ph 07 825-2754 or 07 825-2804).

Photo courtesy New Zealand Herald

Didar Bains (top) and John Pretty show how manure-catching curtain attaches to herringbone milking stalls.

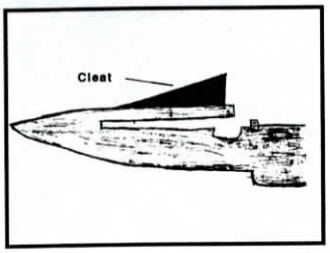
"Cleated" Sickle Guards Save Soybeans

"It saves soybeans by keeping the plants from falling off the sickle guards and onto the ground," says Dan Mulsow, Yates Center, Kan., who welded wedge-shaped steel cleats on top of each guard on his 1967 Gleaner E combine's sickle. He says it's a simple idea that works on other, newer models as well.

Made from 1/8-in. thick strap iron, the cleats are 1 1/4 in. long and 1/2 in. high at the back and angled downward toward the front.

"I got the idea because when the platform is lowered on older model Gleaner combines, the guards slope downward causing soybean plants to tend to slide off. The cleats catch the plants and hold them on the guards until other plants can push them in. Another problem is that the distance between the sickle and feeder auger on older Gleaner combines is shorter than it is on most other combines, and the auger runs faster. As a result, the auger tends to kick soybean plants away from the header, especially in thin stands. The cleats catch plants that the auger kicks back.

"In thin soybean stands the cleats decrease losses 50 to 75%. In good stands, where crop flow through the combine is better, the cleats also help but not as much.



"It works better than mounting bean pans on the guards because we switch back and forth between milo and soybeans and don't want to waste time installing and removing the pans. The cleats don't interfere with milo or small grain harvest. The same idea might also help on headers equipped with flexible sicklebars," he notes.

Contact: FARM SHOW Followup, Dan Mulsow, Rt. 4, Yates Center, Kan. 66783 (ph 316 625-3419).

Stand-Up Berry Patch Easy To Pick, Maintain

An rural Iowa couple, who have operated a pick-your-own berry farm for the past nine years, have found that they can squeeze more than an acre's worth of plants onto a new 1/5th acre plot by growing strawberries in stacks of pots. The best part is that they no longer have to bend over to pick the berries.

Marc and Diane Bock of Lone Tree, Iowa, had no model available to follow in starting their new berry-growing system so they've been experimenting with different methods as they go along. The plot is 80 by 35 ft. and contains a space-age looking network of white foam pots stacked 7 ft. high, all hooked together by irrigation hoses, cables and wires. The plot contains 8,800 plants in 220, 10-pot stacks. That's about 1,800 more plants than you would find on a 1-acre conventional strawberry patch.

The plants are automatically fed a mixture of water and nutrients by tubes which directly feed each stack of pots. They continually monitor the level of fertilization and take regular leaf-tissue tests to check the health of plants.

The biggest benefit of the controlled feeding set-up that the pot system allows is that they eventually hope to triple the length of the berry picking season, which normally lasts just one month.

Setting up the hydroponic system was not cheap. The Bocks figure they invested $7,000 to $8,000. This year they experimented with 3 different varieties of "day neutral" berries to see which would perform best in pots.

Photos courtesy Des Moines Register

Contact: FARM SHOW Followup, Mark Bock, Bock's Berry Farm, Lone Tree, Iowa 52755 (ph 319 629-5553).

"Liming" Method Keeps Farm Ponds Clean

Two Canadian brothers have started a service cleaning up farm ponds and dugouts using a new clean-up method developed by researchers at the University of Alberta and at the National Water and Research Institute, Burlington, Ontario.

The goal was to find an easier way to keep ponds clear of decomposing algae and weeds that produce hydrogen sulphide gas which gives the water a "rotten egg" taste and odor that cattle don't like. Algae and weeds thrive on excessive levels of phosphorus in the water created by such things as silt-laden runoff water.

Conventional methods of making water more palatable for livestock are expensive and unreliable, according to Alex St. Louis who, along with his brother Bernard, started a new pond cleaning service. Alex says farmers typically treat ponds with copper sulfate or Diquat. Copper sulphate, or bluestone, requires several treatments throughout the year and cattle must be removed from all water treated with bluestone for a period of two weeks. Diquat is effective only on a few species of algae, as well as submerged weeds, and the pond cannot be used for human or animal consumption for 24 hrs. after treatment.

The new inexpensive and non-toxic method developed in Canada works better than either of the above-mentioned methods. It consists simply of applying lime to the pond. Lime is mixed with water and the slurry is then sprayed over the water surface. The lime acts as a coagulant, binding with the algae, phosphorus and other suspended sediment and sinks them to the bottom, leaving behind only clear, high-quality water. With the phosphorus removed, algae will not survive and the pond will remain clear for at least two years after, says Alex.

The problem with the new method is that it's not an easy job to treat a pond. That prompted the two brothers to start a custom business treating farm ponds.

"It takes one or two hours for us to treat a dugout, compared to about 10 hrs. for someone else to just get set up," says Bernard. "Also, hydrated lime is very corrosive and proper safety equipment alone costs about $300. You should have rubber suits, gloves, goggles, dust masks and respirators. They say if you get lime on your skin or in your eyes, you should rinse for 15 min."

The brothers have a small trailer they haul behind their truck which carries an ordinary 5 hp. water pump, a 45-gal. barrel with baffle, 25 ft. of suction line, and 50 ft. of fire hose. The suction line has a plastic bottle tied to it to suspend it in the water so it doesn't get clogged with mud and scum. The firehose has a spray nozzle on the end and the baffle in the barrel provides back pressure, creating agitation so the lime gets mixed thoroughly before the slurry is sprayed over the pond.

"Water temperature in the pond should be at least 60° before it is treated, otherwise the resulting control will not last more than a few months," says Alex, noting that some ponds they have cleaned are still clear after nearly 3 years. Most of their customers are dairy farmers or feeder cattle operations. "With lime, the cattle can drink while you're treating it (as long as you're not treating blue-green algae, which is one of many varieties of algae. In that case, cattle should be kept from the water for 2 to 14 days, depending on the size of the algae bloom)."

A 140 by 60 by 14-ft. deep pond would require about 11 55-lb. bags of lime. Since it will raise the ph level, it should be applied at a rate that will not raise the ph above 10.5.

Alberta Agriculture's water specialist Bob Buchanan can answer questions about the treatment (ph 403 674-8264).

Contact: FARM SHOW Followup, Bare-All Dugout Liming Service, Bernard & Alex St. Louis, Pickardville, Alberta, Canada (ph 403 349-2560 or 349-6075).