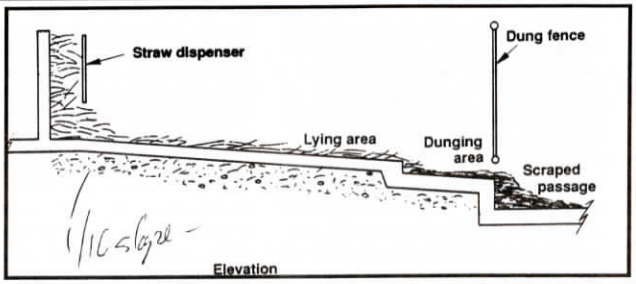


Straw Flow System "Automatically" Beds Hog Pens With Straw

Scottish ag engineers have come up with a new hog building design that makes it easy to bed down hogs with straw.

At least one large rural builder in Britain is already putting up "Straw Flow" confinement buildings and Canadian hog producers and builders have also been looking closely at the idea.

Essentially, the idea consists of a sloped lying area with "self-help" straw hoppers at the upper end where hogs can pull out their own straw bedding. Straw then moves gradually down the slope by gravity over a period of days to a scraper alley where it can be easily removed. There's no buildup of manure in the pens and no need to enter the pens either to spread more straw or to scrape it out.

British farmers are particularly interested in the new idea because of new animal welfare regulations that will force them to provide bedding in pens whether they want to or not. But Dale Arey of the Scottish Ag Engineering Institute in Aberdeen, Scotland, told FARM SHOW there are many benefits to bedding with straw even if animal welfarists don't pass laws requiring it.

"Pulling straw out of the hoppers gives hogs something to do, reducing agression and lowering stress. It also gives the pig a feeling of well being. As a bedding it prevents bruises and stiffness and keeps pigs warm," says Arey. "The problem with using straw is that it's expensive to handle, spread and remove, and it builds up quickly resulting in dirty pens if not removed regularly. This new system eliminates those problems."

A 30-ft. sq. pen with 15 to 20 hogs in it will go through about one sq. bale of straw a week, according to Arey. The floor has a 1:16 slope. The amount of straw dispensed from the hopper can be controlled by opening or closing the gate. In winter you might want to let more straw out. In summer, less.

For more information, contact: FARM SHOW Followup, Dr. J.M. Bruce, SAC, Centre for Rural Building, Craibstone, Bucksburn, Aberdeen AB2 9TR Scotland (ph 0224 713622).

Add-On Auger Returns Unthreshed Grain To Combine Feederhouse

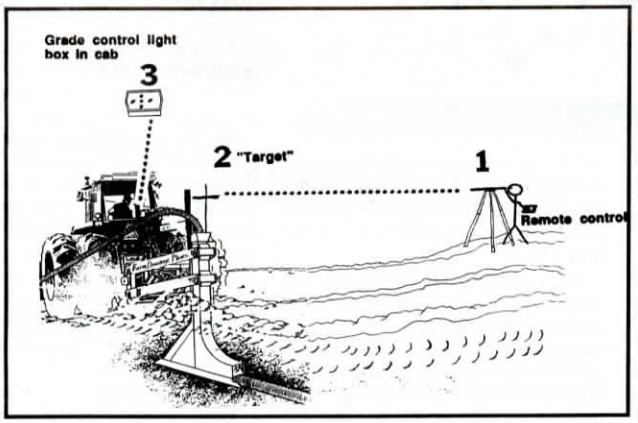
When the cylinder and shaft on his son-in-law's Massey Ferguson 750 combine rethresher wore out, Herman Ulrich replaced the rethresher with an auger that returns unthreshed grain from the elevator back to the feederhouse.

"It would have cost about $500 to replace the rethresher. I already had the auger and spent a total of $60 for a pulley, two bearings, and a 5-ft. length of flexible hose," says Ulrich, of Lampman, Sask. "On most other combines an auger returns unthreshed grain to the feederhouse, but Massey combines use a separate rethresher. One company makes an add-on return auger for Massey combines but it costs about $2,400."

Ulrich removed the rethresher and used straps to bolt the 11-ft. long, 6-in. dia. auger to the side of the combine. He mounted a pulley at the bottom of the elevator and rerouted two idler pulleys so he could belt-drive the bottom end of the auger. He also mounted a bearing on each end of the auger. He used sheet metal to build a spout that delivers unthreshed grain by gravity from the top of the elevator down the bottom of the auger.

He welded a short length of 6-in. dia. tubing to a steel plate and bolted the plate to the top of the feederhouse. He welded another short length of 6-in. dia. tubing to the auger spout. He then ran a length of flexible hose between the auger and feederhouse.

Contact: FARM SHOW Followup, Herman Ulrich, Box 1, Lampman, Sask. Canada S0C 1N0 (ph 306 487-2469).



Inexpensive New Grade Control Device

Don Wurdinger of Waverly, Iowa, is known to many FARM SHOW readers as manufacturer of tractor-mounted do-it-yourself farm tiling machines. Now he's come up with a simple new grade control device that he says does the job of laser guidance systems that can cost as much as $20,000 when plumbed directly into tractor hydraulic systems.

What he needed was a way to let farmers maintain an even grade when laying tile so it would drain properly. Some of his customers mounted laser systems on his farm drainage plow but he wanted to find something less expensive that would help him sell more tile plows.

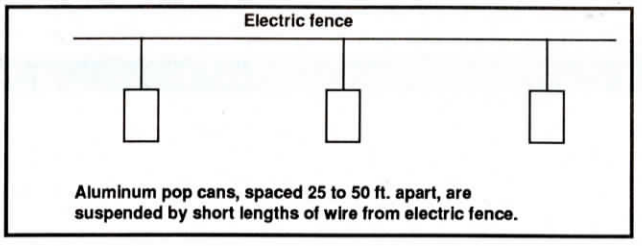
What he came up with is a grade system that uses the remote control transmitter box from a toy remote controlled car. "It does the job of an expensive laser system but costs just $495 and would work great for any type of plowing, ditching, terracing, grading or other land leveling type work," says Wurdinger, adding that the system could also be used by combine operators to send signals to truck drivers as they load on-the-go in the field. The system could also be used by regular surveying crews when hand signals or radio communications are not possible due to obstructions or noise.

The system consists of the transmitter and a set of control lights that either mount in the cab or directly on the tile plow. One person sets up a transit or level in the field and zeros in on a target somewhere on the tile plow, setting the transit for the proper amount of grade. Then all he has to do is make sure the target stays on dead center all the way down the line of tile being laid. He holds the transmitter in his hand and uses it to let the operator know if he has to go up or down to stay on grade or from one side to the other to stay on line.

The indicator light box is fitted with red and green directional lights that tell the operator whether to raise or lower the 3-pt. When he's dead on target the center green light ignites.

"We've used it over distances of 1,500 ft. or more. Under the right conditons, the transmitter will send a signal as far as a half mile," says Wurdinger.

Contact: FARM SHOW Followup, Don Wurdinger, Farm Drainage Plows, 909 4th N.W., Waverly, Iowa 50677 (ph 319 352-3911).



Aluminum pop cans, spaced 25 to 50 ft. apart, are suspended by short lengths of wire from electric fence.

"Pop Can" Electric Fence

"Tieing empty aluminum pop cans onto an electric fence makes it more visible and keeps cattle from breaking through the fence before they see it. The cans also conduct electricity," says Harry Franklin, who has used the idea for the past four years on his own cow-calf operation near Wakefield, Quebec.

Franklin punches a hole in the bottom of the can, passes a wire through both ends, and ties the can on the fence. The cans are spaced every 25 to 50 ft. and hang about 6 in. below the fence.

"It's almost unbelievable how much it increases the efficiency of an electric fence," says Franklin. "I have lots of electric fences on my farm and had problems with cattle breaking through them. The problem is that the first time cattle see the fence they aren't afraid of it and will walk right through it before they even receive a shock. The pop cans sway in the wind and are much more visible than the electric fence. The sight of the cans makes cattle more cautious. I use aluminum wire wire because it conducts electricity. After cattle get a shock they back away and stay away. If there's a dip in the ground I hang the cans down farther from the fence so cattle aren't as likely to try crawling under it."

Contact: FARM SHOW Followup, Harry Franklin, Rt. 3, Wakefield, Quebec Canada J0X 3G0 (ph 819 459-2011).