

Conveyor belt runs length of barn beneath slatted portion of pens, moving manure out of barn. Belt is tilted at a 4 degree angle, so urine runs into channel along lower side.

Conveyers Move Manure, Cut Odor, Improve Gain

A new idea developed at North Carolina State University (NCSU) may help solve big problems for hog farmers. A conveyor belt moves manure out of the barn throughout the day. It also separates the solids from the urine and reduces ammonia levels in the barn by as much as 75 percent. This appears to have an impact on feed conversion as well.

"It has worked really well capturing ammonia from the liquids," says Jeanne Koger, researcher, NCSU. "Just reducing emissions is a real benefit. We also get better feed-to-gain ratios with the belt system, so there is potential for feed savings, too."

A belt runs the length of the barn beneath the slatted portion of the pens. The belt is tilted at a 4° angle, which causes the urine to run into a channel along the lower side of the belt. A 1° slope in the belt lengthwise keeps the urine flowing to a filtration unit at the

end of the barn.

The belt itself is made from polypropylene. It slowly runs over a series of stationary metal bars attached to a frame under the floor. At the end of the belt, a bar scrapes the manure solids from the belt.

Koger gives credit to much of the design to Preston Burnette, a mechanical engineer. "He did a lot of work designing the belt and building it," says Koger.

"One system has already been installed in a two story hog barn in the Netherlands, and they report improved hog health," says Koger, who hopes to get a system installed in a U.S. commercial hog barn soon.

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Auger Leveling Device

Richard Martin, Burton View, Ill., came up with an idea for leveling his grain auger at various locations, no matter how rough or uneven the ground.

Two screw jacks mount on either side of a sliding bracket that moves freely back and forth across the axle. It can be positioned on either side, as needed.

"Saves a lot of time setting up and moving it," says Martin.

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Two screw jacks mount on either side of sliding bracket that moves freely back and forth across auger's axle, keeping it level.

Two Trailers Made From One

With skill and patience, brothers Jon Roy and Joel Kely of Larned, Kansas split a 1968 double decker cattle trailer into two single deck trailers.

The pair bought the trailer at an auction for \$600, and then spent two months reworking it.

The Keltys spent another \$6,000 on materials, but in the end were able to sell one of the resulting trailers for \$1,000, and were still left with a good trailer for their own use.

They cut off the top half of the trailer, right under the top deck. The bottom half was sold as an open-top trailer along with the original hitch and wheels.

The top deck now needed axles, wheels, and a hitch, and the brothers bought these items at a salvage yard and made a 6 by 8-in. frame out of galvanized tubing.

Because the top deck was only 5 ft. tall on the inside, they decided to splice in another

18 in. of height. This made the trailer more comfortable to work in.

The top deck was just 32 ft. long so the Keltys added 8 ft. of "drop down" wood floor with 4 ft. sheet metal sides. This back section is only 14 in. high so they can load without a chute.

An interior ramp gets cattle up to the upper level. It folds down when in use, and against the wall when not needed. There's also a gate on the upper floor that keeps the cattle in the top.

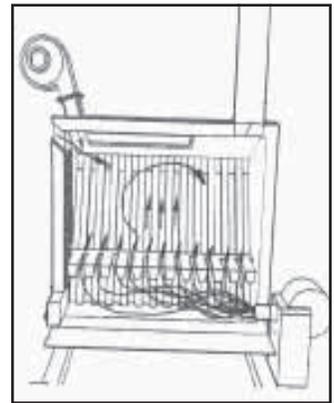
The trailer's capacity is 25 mature cows, including 6 on the back end.

In addition, the Keltys installed a new, wider sliding gate on the back of the unit so an ATV could be driven in and transported on the lower level instead of the extra cows, if so desired.

"We use this trailer for moving cattle to and from pasture and whenever we go to



"Eliminator" crematories are only ones on market that bottom burn, says manufacturer. Three different models are available.



Back Yard "Crematory" Catches On

Back yard crematories are catching on as a good way to dispose of dead critters for livestock producers, vets and others. Even funeral homes are buying them to handle pet cremation requests.

"Animals can't be cremated in one used for people," explains Sammy Massey, president, Southern Breeze Mfg., Inc. "We've also had vets that have gone into the cremation business. Another big market is back yard deer processors."

Massey builds three models to handle from 250 to 2,000 lbs. at a time, with prices ranging from \$3,950 to \$7,950. All three models utilize a wedge shaped, self-feeding design. The Eliminator crematories are the only ones on the market that bottom burn. Burners mount on the bottom, sides and over the top. The design of the burners is important to get-

ting a complete burn, says Massey.

"Other units on the market only burn from the top, and grease can run out the bottom, contaminating the soil," he says. "With this design, the grease becomes fuel for the fire and burns up."

Massey says one of his units can reduce a 500-lb. load to fit in a 1-gal. container. The entire burn will take only 3 1/2 hours.

An optional afterburner acts like a catalytic converter and is 95 percent smokeless. Massey also has an updated unit with a top that will open up for a 200 to 350-lb. hog or calf. All Eliminators meet or exceed EPA standards.

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Laser Chases Pest Birds From Roosts

If you've ever tried to chase off pest birds once they're roosting, you know how hard it is. Some people use bird-chasing shot gun shells loaded with special explosives. The problem is that the noise will disturb not only your neighbors, but also other wildlife.

There's a new choice out there called the "Bird Phazer" which consists of a red laser pointer that the company says is 20 to 30 times stronger than the typical laser pointers on the market.

"It's the only effective and completely silent device we know of that will chase off geese, ducks, herons, starlings and pigeons at night," says Jim Burton of JWB Marketing, about the low-power, long-wavelength lasers. "The birds are startled by the strong contrast between ambient light and the laser beam. It annoys the birds because their eyes are more sensitive at that range of light, yet it does no permanent damage to the birds."

Burton says it usually takes from 3 to 5 nights of harassment with the laser before



"Bird Phazer" consists of a red laser pointer that startles birds off their roosts at night.

birds will give up a roosting spot and go elsewhere.

The power laser light projects out nearly 5 miles. It's powered by 2AAA batteries, which will run it for an hour of continuous use.

Sells for \$139.

Contact: FARM SHOW Followup, Jim Burton, JWB Marketing LLC, 2308 Raven Trail, West Columbia, S.C. 29169 (ph 800 555-9634; website: www.birdcontrolsupplies.com).



The Keltys split a 1968 double decker cattle trailer into two single deck trailers. "We sold one and use this one to move cattle to and from pasture and to market," they say.

market," he says. "We had seen someone else about 20 miles from us cut a cattle trailer into two, and thought it would also work good for us. We already had the truck to pull it."

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