



He Keeps Silage In "Zip-Lock" Bags

Last year, the transmission in David Wright's Deere 4630 went out just as he was getting ready to harvest silage. Since he normally used the tractor to spread and pack silage into his bunk silo, he had to quickly come up with a new way to handle his silage.

The Alexandria, Ala., dairy farmer decided to put his silage in a giant "Zip-Lock" plastic bag and then vacuum the air and moisture out of it. He discovered that the method holds several advantages over packing a bunk silo, Wright notes.

"The goal was to store the highest quality silage with the least expense and labor," he says. "We estimate per-ton cost at about \$1.25 for the 160 tons of legumes, alfalfa, grasses and puna chicory that we vacuum bagged last year. By locating the plastic 'silo' close to the field, we eliminated the need for a dump truck to haul it to our bunk silo. We also eliminated the need for a packing tractor."

Wright's bag 'silo' consisted of two 40 by 100 ft. layers of 6 mil. black plastic laid out one on top of the other on a well-drained sloped area.

One side of the two layers of plastic is wrapped around a 110-ft. length of Schedule 40 2-in. dia. PVC pipe. The plastic is held tight to the PVC pipe with 4-in. long C clips made out of 2-in. dia. PVC pipe cut in thirds and tapped into place every 3 ft.

The top layer of plastic is pulled back across the seam and another 110-ft. length of PVC pipe is attached to the opposite end of the bottom layer in the same manner. A hand crank bolts to one end of this pipe. Plastic is then cranked to within about 15 ft. of the seam.

The silage is then dumped onto the 15-ft. span from Wright's 5-ton Richardton dump wagon starting about 10 ft. from one end. Subsequent loads are dumped so they overlap, forming a continuous windrow of 8 loads in the first row.

Wright made a vacuum pipe out of a 100 ft. length of 2-in. dia. PVC pipe with 3/8-in. dia. holes drilled every 8 in. The pipe lays next to the first row of silage with about 10 ft. extending out one end.

Next plastic is cranked out wider and four more rows of silage are dumped, forming a stack 80 ft. long by 25 to 30 ft. wide by 8 ft. high, for a total of 160 tons.

Once the stack is complete, the top layer of plastic is simply pulled over the top and secured with additional lengths of PVC pipe.

An old milking machine vacuum pump connects to the vacuum pipe to suck out air



Wright dumps loads of silage onto plastic lying flat on ground.



Plastic clips made from short sections of pipe are used to clamp plastic to pipe.



Once silage is enclosed in plastic, a vacuum pump sucks air out of pile, sucking plastic down tight on silage.

and moisture. Within 30 minutes, the plastic begins to tighten around the stack as air is removed. Within four hours, plastic is pulled tight against it.

Wright began feeding the silage five or six weeks after vacuum-bagging it. There was very little spoilage, he says, adding that a conventional front-end loader bucket fitted with grapplers on top works well for unloading the bag.

In addition, the stack could be self-fed, he adds.

The biggest surprise: "We expected to see 1,000 to 2,000 gallons of effluent come through the vacuum line since the green chop was showing a moisture level of over 78 percent. But we were pleasantly surprised to get less than 30 gallons. One explanation is that it was long-chopped, about 5 in., and another is that we didn't run a tractor over the pile to pack it."

Total cost of the silo was \$390, including \$200 for the plastic, the top sheet of which can be reused as well as the PVC pipe.

Contact: FARM SHOW Followup, David Wright, Canebrake Farms, 174 Cane Creek Farm Rd., Alexandria, Ala. 36250 (ph 205 820-3729).

Electric Shock Collars Keep Cows Out Of Stream

The same "invisible fence" system used to keep dogs at home is being used to keep cows out of a stream that goes through a pasture in Maryland.

Dairyman Bob Greise, of Cumberland, put the electronic "shock collars" on his 100 cows as part of a federally funded watershed project designed to reduce pollution in the Evitt's Creek watershed, a mountainous area on the Maryland-Pennsylvania border where periodic flooding makes conventional fences impractical.

"I needed something besides conventional fencing along the creek. Conventional fencing would keep the cows out of the creek, but every time we'd get a heavy rain the water would wash out the fence," says Greise.

The Invisible Fence system (Invisible Fence Co., 355 Phoenixville Pike, Malvern, Penn. 19355 ph 800 923-7378) consists simply of a buried wire that runs around the perimeter of the area being protected and a transmitter that sends a radio signal through the wire. If an animal wearing a special collar gets too close to the wire, it gets a mild shock.

Greise buried a wire for about a half mile on each side of the stream. Each of his 100 cows wears a leather choker with a pink plastic box that contains batteries and beeps as the cow approaches the buried wire. The beeps warn the cows that they're getting too close to the wire and may get a shock. If the cow keeps going, it gets shocked.

So far, the system has worked well but there have been some problems, says Greise. "When it's working it keeps the cows out of the creek. With the amount of rain we've had since we installed the system in early summer last year, conventional fences



Dairyman Bob Greise put electronic "shock collars" on his 100 cows, eliminating the need for a conventional fence alongside this stream.

would have washed out several times. The voltage is the same as that used for dogs. It's lower than the voltage delivered by a conventional electric fence. The cows learned in less than two days with little or no training.

"The collars take more abuse on a cow than they do on a dog. They have to be kept fairly tight on the cows and have to be checked often to make sure that they're still working. We had problems with the collars breaking because our cows eat out of a stanchion feeder where the collars can get caught. Another problem is that the batteries are supposed to last 6 to 12 months but some of ours haven't lasted nearly that long. I wish I could use an instrument to check the amount of shock so I would know that it's working.

"Overall, I think the system has a lot of potential if we can get the bugs worked out."

Contact: FARM SHOW Followup, Bob Greise, 12200 Mason Road, Cumberland, Md. 21502 (ph 301 722-2554).

Got Problems With Deer? Try These Solutions

Crop-stealing deer are a growing problem in many areas of North America. We've rounded up a few "tried and true" ideas, as well as some new commercial products that may hold promise.

"Tried & True"

- Mesh bags filled with human hair collected from barber shops works for many people. Hair should be dirty, not collected after a shampoo.
- Tie pieces of deoderant soap around the area you want to protect. Cut a large bar into 6 pieces and place each piece in a mesh bag, such as a section of panty hose, and hang from a pole or branch. Non-deoderant soap does not work.
- Make up a mixture of eggs and water and spray it on foliage. Mix two eggs with a cup of water in a high speed blender, and then add to a gallon of water. The mixture does not wash off easily. Reapplication two or three times a season is necessary. Also works to repel rabbits.
- Nail plastic grocery bags to sticks and put them around your garden or the edges of fields. They fill when the wind blows and look like balloons.
- Surround the area you want to protect with Invisible Fence, the kind used to keep dogs in a yard (you can reach Invisible Fence at 800 923-7378). Let one or two dogs roam freely within the fenced area to chase deer.

"Deer Off"

"Deer Off" contains several known repellents all in one, including rotten eggs, garlic and capsaicin (hot pepper), in a special rain-resistant formula. A 32-oz spray bottle treats approximately 500 sq. ft. and sells for

\$19.95; concentrate 32 oz. bottle (makes 2 gal.) sells for \$49.95.

Contact: FARM SHOW Followup, Deer Off, 1127 High Ridge Rd., Suite 204, Stamford, Conn. 06905 (ph 800 333-7633 or 203 968-8485)

Deerbusters

"Deerbusters" of Frederick, Md., is a mail order company that offers a full line of deer repellents as well as special fencing materials and ultrasonic scaring devices.

Here's a sample of what the company has to offer:

- Coyote urine fools deer into thinking predators are present in the area. A 32 oz. bottle of 100 percent coyote urine sells for \$29.95.
- "Hinder" contains ammonium salts and fatty acids that repel deer and rabbits. It may be applied to fruit trees, nursery stock, field crops, and vegetable gardens. Apply with conventional spray equipment. A 1 gal. container, enough to mix up 20 to 40 gals., sells for \$31.95.
- Deer Blaster is a high tech ultrasonic device that's designed to startle deer without letting them get used to the sound. Sound is nearly inaudible to humans. Spans 4,000 sq. ft. Sells for \$99.

For a free catalog of these and other products, contact: FARM SHOW Followup, Deerbusters, 9735 A Bethel Road, Frederick, Md. 21702 (ph 800 248-3337).