

# Bunker silos provide economical storage

NEWARK, Del. — As herds get bigger and the money squeeze tighter, dairymen are looking for ways to produce more of their own cattle feed.

Silage is the least expensive way to give your cows the food energy they need, says University of Delaware extension dairy specialist George Haenlein. But he doubts whether most of the area's dairy farmers are presently feeding it to all their cows, all year round.

One problem you may face if you decide to increase the amount of silage you feed is finding a good place to store it. If space is inadequate, you have the option of buying a new tower silo, adding to the capacity of your old one, building yourself a bunker silo, or simply storing the silage on top of the ground under plastic tarp.

Haenlein and extension agricultural engineer Ernest Walpole say that for temporary storage the cheapest thing you can do is pick out a high, well-drained

site near your feedlot, dump silage there in a big loaf-shaped stack, and cover it with polyethylene tarp.

Use bales of hay or earth to anchor the edges tightly all the way around so that air can't get in and cause spoilage.

Another temporary solution to your storage needs might be to take a tractor and scoop out a trench. Fill this with silage and cover it with plastic tarp anchored down with old tires.

Storing silage directly on the ground this way will result in some feed contamination, warn the specialists. Also, your equipment may get bogged down during sloppy weather. For these reasons they don't recommend using a temporary bunker for more than one year.

For permanent horizontal storage provide the bunker with either wood or cement sides and a cement floor.

Use 12 foot posts or railroad ties for the sides, setting them 4' into

the ground at 4 foot intervals. Then nail pressure treated planks to them. Or line the sides of the bunker with precast concrete slabs tilted on their edges.

Concrete is preferable to wood because it will resist mechanical damage better, notes Walpole.

Pour a six inch pad of concrete reinforced with welded wire for the floor. Be sure to slope it toward the unloading end of the bunker to provide runoff for rainwater.

If wood sidewalls are used, extend the floor six inches beyond the walls so the posts are encased in concrete.

A well-constructed bunker silo will cost you about half as much as a new tower silo, so this storage system represents a considerable savings. But it's not practical unless you make it big enough. There will always be some waste.

The smaller the bunker, the greater the percentage of feed lost. So you need a large herd to warrant building this kind of silo, say the specialists. A bunker 40

feet wide, 8 feet high and 180 feet long will hold 1000 tons of silage — enough to provide the daily needs of 100 cows for a year.

Another consideration with bunker silos is the fact that you'll be opting for a system that requires a chuckwagon or self-unloading wagon to deliver silage along the feed bunk. If you want a push-button system with conveyors, you almost have to stay with a tower silo.

Because there's a greater chance of spoilage with feed stored in bunkers, Walpole recommends feeding from them only during cooler weather. Save your tower silage for warm weather use.

Even well-covered bunker silage may begin to spoil at the exposed end where feed is removed each day.

If you decide that a horizontal system would solve your storage needs, now is a good time to build one. It will soon be time to harvest this year's silage crop.

Blueprints for building a bunker

silo are available from the extension engineer in many states. Or, write or call: Extension Agricultural Engineer Ernest Walpole, Agricultural Hall, University of Delaware, Newark, DE 19711 302/738-2468.

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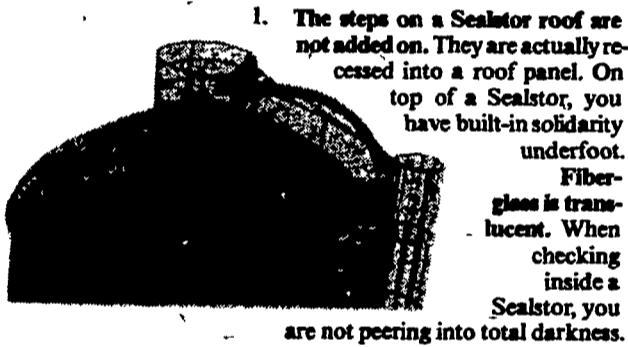
What should you serve with corned beef? Buttery Caraway Potatoes and Cabbage are the perfect menu-mates. To make four servings, peel six small, new potatoes and cook in boiling, salted water until tender, about 20 minutes. Drain well; set aside. Melt three tablespoons butter in large skillet; add three cups sliced green cabbage (about 1 lb.), one teaspoon caraway seed, one-fourth teaspoon salt and one-eighth teaspoon pepper. Cook, covered, until cabbage is crisp tender, about three minutes. Add cooked potatoes; heat to serving temperature.

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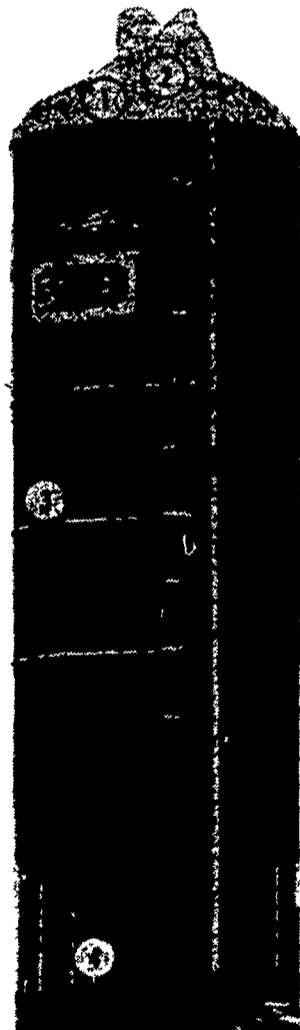
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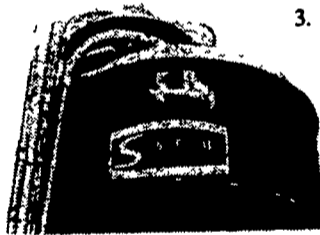
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