

Dairy Pipeline

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Winter Time Is Ventilation Time

Cattle need a healthy environment to be healthy themselves and to have the opportunity to perform well for us, and reward us for the time and money we have invested in them. A healthy environment includes fresh air, some protection from the weather, and a clean, dry draft-free place to rest. Notice that I said nothing about warmth. If we provide cattle with plenty of forage in the winter, along with the requirements mentioned above for a healthy environment, they will be warm enough. The body heat cattle generate from digesting forages will keep them warm.

These requirements are easy to meet during the pasture season when cattle can be outdoors. The challenge is much greater when we start to confine cattle, especially during the changing weather conditions of late Fall and early Spring, and during warm winter days! There are many ways we can provide cattle with a healthy environment.

One of the healthiest and perhaps easiest ways is to offer them a clean, dry, draft-free pen or barn that has one side opening to the southeast into an outside lot. A calf hutch is another good example of this type of shelter. In addition to plenty of fresh air, cattle are offered a rather wide range of environmental conditions, and they have the freedom to choose their own comfort zones. However, these types of facilities do not fit every farm situation. There are other alternatives, but they may require more management and some wise decisions on your part.

When we confine cattle to the indoors, we make them prisoners to those conditions which exist in their pen or in the barn, conditions which often times they can not escape. If we do a less-than-adequate job, we also make them victims of our own mismanagement. Then we both lose out — the cattle and us. Remember, the more we confine animals, the less freedom we give them to choose their own comfort zones, and the more

responsibility we place upon ourselves to supply them with the environmental conditions they need to be healthy and to do a good job working for us.

What conditions do cattle need, conditions which we should try to duplicate in our dairy barns? I mentioned some of these at the beginning. We can also learn a lot about what makes an animal comfortable by observing her actions closely. What is she trying to avoid? What areas and conditions does she seek out, and at what times and under what circumstances? Observe cattle in open-front facilities with outside lots — clean facilities and filthy, poorly-ventilated facilities; they'll tell you what they like best, and when. Think, too, about what makes you comfortable and uncomfortable. Think about those over-crowded, stuffy, smoke-filled rooms you may have been in at times, or that seat you had by a cold window or in the cold draft of a vent or fan. How good it felt to get out for a breath of fresh air or away from the draft! You were fortunate; you could get away from these unhealthy and uncomfortable conditions. Let's provide cattle a similar opportunity. Better yet, let's attempt to never let these unhealthy environments exist in our barns.

Barn can be ventilated naturally by cracking windows and vents, or mechanically by relying upon fans to change the air. As a guide line, we like to see 50 cfm of air being ex-

changed continuously for each 100 pounds of animal body weight. This provides for a continuous change of air, even in the coldest of days; it keeps the air fresh, and it removes air-borne germs and excess humidity. This is very important, even if it means keeping the barn cold. This can be accomplished by a small fan running continuously. In addition to this small fan, another fan (or set of fans) is needed to move an additional 150 cfm of air per 100 pounds of body weight. This fan should be controlled by a thermostat set around 45-55°F.

All of these fans should be located together in one cluster and located in a south or east wall for greatest operating efficiency. For draft control and for balanced air flow, air inlet shots should be located around the full length of all four walls to within 10 feet of either side of the fans. These inlets should be adjustable so the size of the inlet slot can be easily changed during various seasons of the year. All other cracks and air leaks should be sealed.

Few barns have these ideal air inlets. Then what? If we can't do an adequate job using existing windows as air inlets, then it may be necessary to install some strategically located ducts that bring fresh air in from the outside. This is often the case with remodeled stall barns. The new wing, with more windows and inlets, is usually the coldest end. Instead of shutting the windows in the cold end,

which chokes down the fan and makes the old part of the barn even more stuffy, it is usually necessary to provide more inlets into the old section so as to more evenly balance the air flow. To reduce drafts, attempt to have a lot of small openings distributed uniformly throughout the entire barn.

What about pole barns and lean-to's? An air exchange will usually occur if we provide open eaves and an opening along the full length of the ridge. The ridge opening should not restrict the updraft of air trying to escape. It should be two inches wide for every 10 feet of building width, and no less than six inches wide. If the ridge is capped, the bottom of the cap should be at least

4-8 inches above the top level of the roofing. These openings will help let the warm moist air escape and reduce the amount of condensation dripping from the roof; it'll also lengthen the life of the building. Even with these openings, there may be a few minutes of dripping on a frosty morning when the sun first hits the roof. These buildings will be cold in winter. They'll seldom get much warmer than the outside temperature, and if they are shaded from the sun, they may actually feel colder.

So, in summary, remember that cattle need fresh air at all times, even on those cold days when it's very tempting to close the barn up tightly.

Mexico, U.S. agree to trade pesos and grain

WASHINGTON, D.C. — The United States and Mexico announced today an agreement for the sale of U.S. agricultural products to Mexico in 1980.

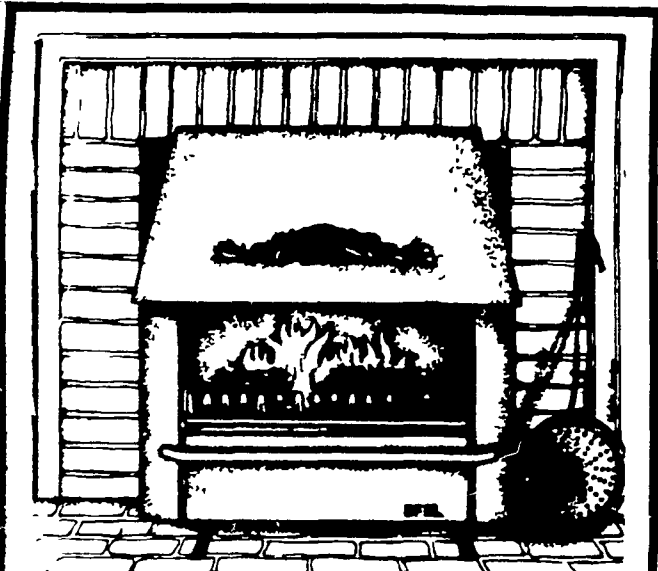
According to Undersecretary of Agriculture Dale E. Hathaway, the U.S. government has agreed to make available to the government of Mexico some of the quantities of wheat, corn, soybean and soybean products resulting from the suspension of exports to the Soviet Union and to assist in obtaining specific quantities of sorghum, edible beans, sunflower seeds, tallow and

rice on behalf of the Mexican government.

The quantity of these products is expected to total nearly 4.8 million metric tons.

Both countries further agreed to continue parallel discussions for sale in 1981 and 1982.

The two governments look forward to establishing new and positive directions in their bilateral relationship. They foresee increased trade with one another whereby each country can help meet the needs of its neighbor, and both economies can thereby be strengthened.



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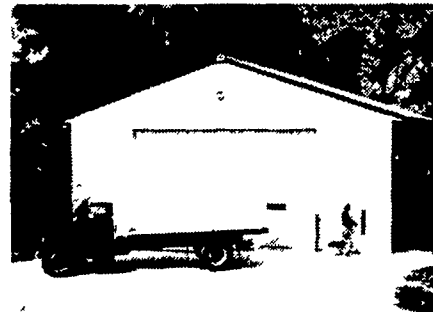
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