Providing Pastures in Winter

Unfortunately last season was unfavorable in most parts of Western Canada for the growing of corn. Late spring frosts kept the young plants back and then early frosts in the fall killed what plants were hardy enough to grow long before they had reached maturity. Last year's experience will not have any effect in the way of discouraging any farmer who really has tested the value of corn from again this spring sowing a few acres to this fodder crop. It is altogether improbable that another season similar to the last will be experienced again in the west for a number of years at least. In any event the experience of countries further south, but under very similar climatic conditions compared with our own should form a reasonable basis for comparison, and it is significant to note that not many years ago in North Dakota it was thought that corn could not be matured in the state. The first start was made with the squaw variety, which grew to a height of about four feet and the ears appeared just above the ground. Today their corn grows to a height of from eight to ten feet, and they are not only producing a corn for home consumption but are shipping a surplus to other markets. In a talk before the Manitoba Dairymen's Association, W. J. Cummings, of the Glenlea stock farm, who has been consistently successful in raising corn for silage and fodder in the Red River Valley for a number of years, made out a strong case for the growing of corn by every farmer who has any stock, and gave as his opinion that the silo will solve the question of getting the most value out of immature corn. In part he said as follows:

"The question of maturing the corn crop need not worry the Western farmer, as in districts where they have matured corn for years they have gone very extensively into silos in the last few years, and today a certain per cent. of their corn crop is sown expressly for the silage, as they realize they are able to obtain as much if not more out of the crop in this manner than if it were allowed to mature and be sold for grain. By no other means can so large a percentage of the feed value of the corn crop be secured as by the use of the silo. Every pound of the crop that grows above ground is available for feed in the most tempting and digestible condition if cured in a silo, and it can be kept so for an almost unlimited length of time if the silo is properly constructed. After many tests it has been demonstrated that corn is at its highest feeding value when it is ready to be placed in the silo, and during the period of fermentation it only loses from eight to ten per cent. of its original feeding value, which is very small when taking into consideration that the crop in the crib will shrink about twenty per cent, in the vear and the stalks in the field will lose about forty per cent. of their feeding value.

Silage Good for Years

"Corn ensilage is not only a most satisfactory feed for both dairy and beef animals in the winter season but it is equally as good during the summer months, especially so with the dairy animal. Where experiments have been carried on it has been shown that dairy cattle will thrive just as well on ensilage as on soiling crops, and the ensilage can be produced at much less expense when taking into consideration the plowing of the land, the seed, etc. It takes considerably less work to plow, plant and fit a field of corn than it does to prepare and plant at different times of the year a stated amount of a soiling crop. Again climatic conditions must be taken into account as they play a very important part in the success of soiling crops. In the year of drought when the pastures are bad and feed is needed a very decided shrinkage will be found in the soiling crops, while ensilage is in perfect order and condition no matter what the weather, if it was properly ensiled.

"How long will ensilage remain in good feeding condition? This all depends on the work done at the time of filling the silo, if it was put in in the proper condition. Cut small and well packed it will keep indefinitely. Many reports state six and eight years. In filling the silo corn should be as near as possible to the point of its full feeding value. That time is just when the corn is going into the glaze. It should be cut into small pieces, say a half inch in length, and one of the most important things in the entire work is to see that it is properly packed. Too much work cannot be put on this point. If it is possible arrange to start the ensilage cutter at the same time as the corn binder, because the corn should not remain in the field over half a day after it is cut before it is put into the silo. In this way the full value of the entire plant will be made use of. At the Glenlea Farm what is cut this morning is put into the silo in the afternoon, and what is cut this afternoon is put in the next morning. Whenever it cannot be handled in this manner we stop the cutting until we are able to catch up. In this manner you will find you have more than sufficient moisture to cause fermentation, which will start almost immediately, but should you not be able to handle it in this manner, and your corn be left in the field for some days after cutting before you are able to place it in the silo, it should be stooked immediately, and in this manner retain as much of the moisture as possible. If it is necessary on account of lack of moisture in the corn when the silo is being filled it can be arranged in some manner to have a small stream of water run into the blower of the ensilage cutter.

"With regard to when a silo can be used profitably and what size, authorities state that it will pay you to erect a silo if ten head of stock are kept. As to the size that will be answered by the amount of crop to be ensiled, this should be governed by the number of animals to be fed and the length of time ensilage is to be used. A silo should be of such diameter that from two to four inches each day off the entire surface will be removed, otherwise there will be a certain amount of loss thru mold. In what amount can it be fed? About 2½ to 3 pounds per hundredweight of animal per day starting in with a small amount and increasing as your animal becomes accustomed to the feed. How long can it be fed? Just as long as desired. It is the intention of the Glenlea Stock Farm to greatly reduce the pastures and endeavor to have ensilage for the stock the entire year. Pasture is a serious question with all stock men in this country and there are times when our pastures are poor unless we plant crops to follow for this purpose. That is expensive, and we hope to have ensilage enough that we will not be dependent on pastures at all. We expect to use a very small amount of ground for pasture purposes, in fact, it will be just an exercising lot with as good grass in it as we are able to produce just as a change for the stock, and in this way we will be able to handle several times the number of cattle on the same amount of ground, and can produce the feed at considerable less cost to us because there is no grass that will produce the same return per acre from a feeding standpoint as corn.

Material of Silo

"In considering what kind of a silo to build certain things must be carefully considered. First, what material can best be used to make a permanent and air-tight wall? Second, what material can be used to make the most durable and substantial structure, one that will neither decay, burn nor blow down? Third, what material can be most easily and cheaply procured? This is often a matter of location. I am an advocate of the cement silo for many reasons: First, they are fire proof, and should you have the misfortune to loose your barn by fire, and you have the good fortune to save your stock, with the cement silo you would still have your feed. Second, they are almost storm proof. I have known very bad storms to pass over different districts destroying buildings and silos of wooden construction, and the cement ones were almost unharmed. Again, you need no guy wires on the cement silo, while on any wooden silo they are an absolute necessity, and I consider this a very serious thing where young stock are in the yarn about the building as they may be hurt at any time. Again in the cement silo there is no tightening or loosening of the bands which is a very necessary and important thing with any wooden silo. Third, once erected they are there for an unlimited time with a very small amount of repairs, if any, no painting, etc., nor does the acid in the corn seem to have any particular effect on them, while with the wood there is a certain amount of damage done in this manner especially at the base where the cement foundation and the wooden staves meet. In the cement silo I would suggest a light cement wash, that is cement mixed to the thickness of a good cream, be used on the inside each year. It may not be necessary to do this, but its use will ensure a water-tight wall, and no moisture will be absorbed out of the silage next to the wall. In this manner your ensilage will be as good at the wall as in the center of your silo."