Livestock and Dairy

Facts About Care of Farmers' Feeders and Aids to Greater Milk Production.

The importance of silos, siloing and silage has had tardy recognition in the West. The fact that it is the cheapest form in which cattle may be fed in winter is alone enough to make its use more general. The following silage hints will be found useful.

SILAGE during the last three decades has come into general use throughout the United States, especially in those regions where the dairy industry has reached its greatest development. Silage is universally recognized as a good and cheap feed for farm stock, and particularly so for cattle and sheep.

Silage is the best and cheapest form in which a succulent feed can be provided for winter use. An acre of grain can be placed in the silo at a cost not exceeding that of shocking, husking, grinding and shredding. Crops can be put in the silo during weather that can not be used in making hay or curing fodder which is an important consideration in some localities.

A given amount of corn in the form of silage will produce more milk than the same amount when shocked and dried. There is less waste in feeding silage than in feeding fodder. Good silage properly fed is all consumed, and in addition very palatable. Like other succulent feeds it has a beneficial effect upon the digestive organs and some stock can be kept on a given area of land when it is the basis of the ration.

Silage Is Economical.

On account of the smaller cost for labor, silage can be used for supplementing pastures more economically than can soiling crops, unless only a small amount of supplementary feed is required. Converting the corn crop into silage clears the land sooner than if the corn crop is shocked and husked, and because of these advantages, silage, in the general opinion of dairy farmers has increased milk production per cow and has increased the profits per acre.

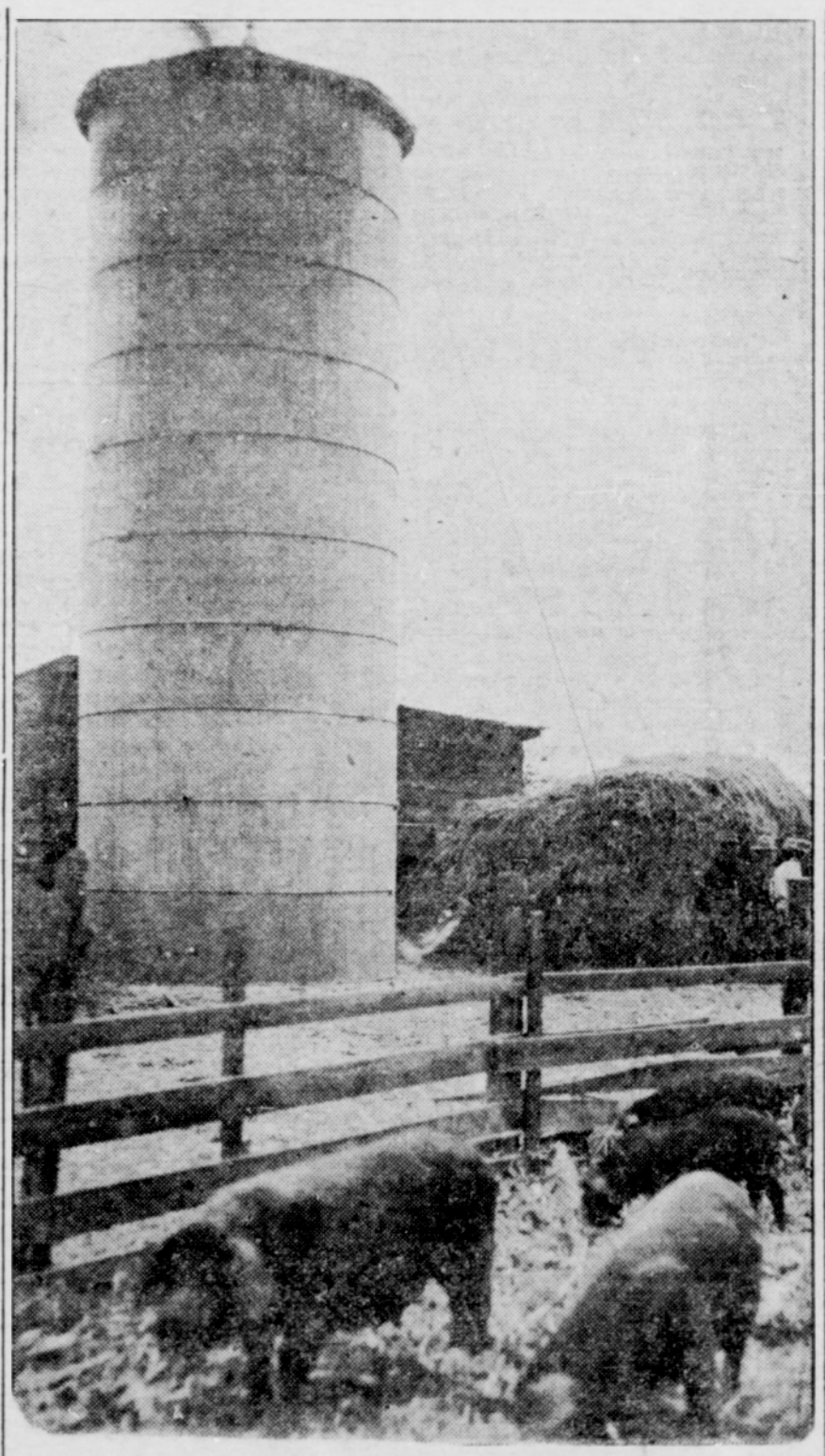
In all parts of the United States where the silo has come into general use the principal silage crop is corn. One reason for this is that ordinarily corn will produce more food material to the acre than any other crop which can be grown. It is more easily harvested and put into the silo than any of the hay crops, susch as clover, cowpeas, or alfalfa.

Furthermore, corn makes an excellent quality of silage. The legumes, such as clover and alfalfa, are liable to rot unless special care is taken to pack the silage thoroughly and force the air out. The only objection which has been raised concerning corn silage is the fact that it contains insufficient protein fully to meet the requirements of animals to which it may be fed. The best variety of corn to plant is that which will mature and yield the largest amount of grain to the acre, since the grain is the most valuable part of the corn plant. The variety commonly raised in any particular locality for grain will also be the most satisfactory to grow for silage.

Cultivation and Yield.

In some sections it is a common practice to plant the corn a little thicker when raised for silage than for grain. Weeds should be kept out, or they will be cut with the corn and may impair the quality of the silage. The amount of silage that can be obtained from an acre of corn will vary from 4 to 20 tons or more. A 50-bushel per acre crop of corn will yield about 8 to 12 tons of silage per acre, depending upon the amount of foliage and stalk that accompanies the ear. Southern varieties of corn as a rule carry a larger proportion of the plant in the form of stalk and leaves than do the northern-grown varieties. Corn should be harvested for the silo at about the same time that it is harvested for fodder.

Sorghums, both saccharine and non-saccharine, are readily made into silage. On account of their superiority to corn as drought-resisting crops they are more commonly grown in those regions of the West where the rainfall is too light or irregular for a good growth of corn. It is important that the sorghums be harvested at the proper stage of maturity if the best results are to be secured. A mixture of corn and sorghum has proved satisfactory in some localities where the rainfall was so variable as to make the corn crop uncertain.



View of Silo in E. G. Copeland's Barn-Yard at Grandview, Wash., With Hogs Rooting in Corn Fodder.

Clover Is Successful.

Clover can be used successfully as a silage crop yielding a palatable product high in protein but it is preferable to make it into hay or the silage made from clover as from other legumes has an objectionable odor, necessitating particular care in feeding to avoid tainting the milk. It does not pack so well as corn, so great care should be exercised in the tramping of the silage at the time of filling, and the depth of the silo should also receive particular attention. Clover should be chopped before siloing as a matter of convenience in feeding and also to secure more thorough packing, although it can be placed in the silo without chopping. Clover should be harvested when in full bloom and some of the first heads are dead.

Cowpeas, alfalfa, and soy beans can be successfully made into silage by exercising the same precautions as with clover. They should be cut at the same time as for hay making. However, it is ordinarily preferable, as with clover, to make them into hay rather than silage. The fermentations which take place in silage made of legumes cause a greater loss of nutritive material than with corn silage. Corn husks and pea vines from canning factories, beet pulp and other by-products are also used in certain localities for filling the silo.

Hand or Machine Cutting.

Corn for the silo can be cut either by hand or machine. Hand cutting is practiced on farms where the amount of corn to be harvested is so small as to make the expense of purchasing a corn harvester too great to justify its use. Hand cutting is slow and laborious and there are probably few localities now where the purchase of a harvester would not be a profitable investment.

There are on the market several makes of silage cutters that will give satisfaction. The capacity of the machine to be purchased is an important consideration which should not be overlooked. Many persons make the mistake of getting a cutter which is too small, thus making the operation of filling the silo very slow and interfering with the continuous employment of the entire force of men. It is better to get a machine large enough so that every one will be able to keep busy all the time. The larger cutters are equipped with self-feeders, a labor-saving device which the smaller sizes lack.

Water Aids Packing.

The usual length of cutting varies from one-half to 1 inch. The latter is considered a little too long, since pieces of this length will neither pack so closely in the silo nor be so completely consumed when fed as will the shorter lengths. On the other hand, the longer the pieces the more rapidly can the corn be run through the cutter.

In case the corn has become too dry or ripe before it is put into the silo, water should be added to supply the deficiency of moisture necessary to make the silage pack properly. Unless it is well packed the silage will "fire-fang" or deteriorate through the growth of mold. Enough water should be added to restore the moisture content of the corn to what it would be if cut at the proper stage. The water may be added by running directly into the silo by means of a hose or by running through the blower. It is claimed that by running it into the blower the water is more thoroughly mixed with the cut corn.

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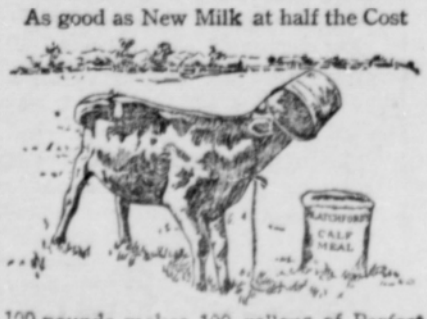

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