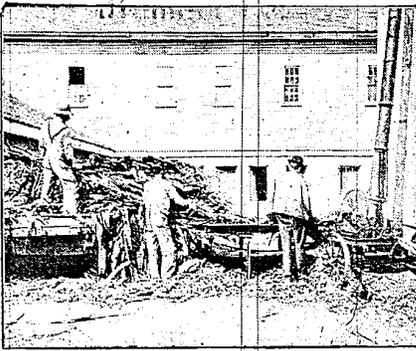


PRESERVATION OF GOOD SILAGE DEPENDS LARGELY UPON PACKING TO EXCLUDE AIR



SAVING ALL OF CORN CROP BY SILO METHOD.

Prepared by the United States Department of Agriculture. Cut corn for silage when the kernels have passed the milk stage and are beginning to dent. At this period the greatest amount of food material can be obtained and the best quality of silage made.

The cutter should be adjusted to cut the corn in short lengths, with three-fourths of an inch as the maximum length. In general the finer the fodder is cut the more easily and more compactly it can be packed and in consequence the better the quality of the silage.

Through Packing Necessary.

Too much stress cannot be laid upon the necessity of thoroughly packing the fodder in the silo so as to exclude the air as much as possible. It is upon this one thing that the keeping of silage largely depends. A device consisting of a jointed pipe or some variation of it, attached to the top of the blower pipe is at present in use for distributing the cut corn fodder in the silo. By the use of this distributor it is possible for one man to scatter the cut corn evenly and at the same time to tramp it. Without the use of this device it is necessary to have at least one extra man in the silo to fork the material over so that it is evenly packed. Besides the saving of one man's labor, the distributor

does away with the nuisance of having the large man standing around thus annoying the man in the silo, and also lessens the danger of being struck by some foreign object that may have passed through the blower.

Add Water at Cutting Time.

Often times the corn fodder is so dry when it is cut that it is necessary to add water to make up for the deficiency in moisture and provide for the proper packing of the silo. This water is most easily added to the blower when the corn is being cut, and it is also more thoroughly mixed with the cut material in this way.

For the top layer of the silo it is good practice to use heavy green stalks from which the ears have been removed. This forms a heavy layer that packs well and at the same time contains a smaller amount of food material so that the silage is not so saturated if it spoils. Various methods and materials have been used for covering the top of the silage to prevent spoiling. None has given complete satisfaction, but the one mentioned above has given as good results as any, especially when the top layer was thoroughly wet down and packed firmly by tramping. The best practice is to have at least one extra man in the silo to fork the material over so that it is evenly packed. Besides the saving of one man's labor, the distributor

FERTILIZERS COST LESS THAN IN 1914

Better Money-Makers for Farmers Now Than Four Years Ago.

PAY WELL IN CASS COUNTY

Department of Soils Reports on Results of Demonstration on County Farm at Cassopolis.

C. F. MILLAR, Aest. Prof. Department of Soils Michigan Agricultural College.

East Lansing, Mich.—Ask the average farmer today if it is good business judgment to buy fertilizers at current prices and he will very probably advise you to wait until the war is over. If he then to whom you put your question is one of those exceptional farmers—and of such kind who stand out from the crowd and then to work out their problems with a pencil and paper, before they risk their venture in the field—he will tell you something very, very different. His advice will be something like this: "Find out what your soil needs. If it requires drainage, or merely liming, it may not pay to buy fertilizer, but if it lacks nitrate and phosphates, then it will pay to buy nitrate and phosphates. For this, these fertilizers are cheaper today than they were in 1914—and if they were profitable for you four years ago, they will be much more so this season."

Of course you will not be content to merely accept someone else's opinion in a matter which calls for the expenditure of not his, but of your money. Without much difficulty—providing you have at hand a list of some of the prices that prevailed in 1914—you will find that fertilizers are really being purchased for less today than was possible four years ago. Your price lists will show you, in detail that while it cost you 1.7 bushels of wheat in 1914 to buy enough acid phosphate to fertilize one acre, you can buy the same amount of phosphate this year for 1.2 bushels of wheat. In 1914 it required 2.21 bushels of rye to buy for enough acid phosphate to fertilize one acre, but now you can buy the same amount of phosphate can be purchased for 1.7 bushels of rye.

Quite often it happens that problems which come forth perfectly on paper and bring forth visions of an increased amount of production and castles in Spain, do not work out so well in practice. But in this matter of fertilizers, figures run true to form.

A test of this was made at Cassopolis, in Cass county, last season. The county farm at Cassopolis was selected for the demonstration. To one acre were applied three tons of ground limestone to another were applied three tons of ground phosphate, 200 pounds of acid phosphate, and 100 pounds of nitrate of soda, while a third acre, used as a check plot, was left untreated. When the spring (rye) was harvested from these plots the results were as follows: The untreated acre produced 15.82 bushels, valued at \$19.35; the acre to which the three tons of ground limestone had been applied gave 35.66 bushels, valued at \$43.59; the acre fertilized with three tons of limestone, acid phosphate and nitrate of soda gave 20.03 bushels, valued at \$31.44. The cost of the limestone alone was \$2.25, and the cost of the limestone and fertilizers \$3.10, including the labor of buying and applying it. After these items had been subtracted from the total returns, the most heavily fertilized field showed a net return of \$4.11 traceable directly to the fertilizers, or a profit of more than 50 per cent of the investment made.

By way of indicating how these fertilizer costs were determined it may be explained that the acid phosphate was applied the year before, and consequently the rye crop was charged with only one-third of the original cost. The nitrate of soda was charged for in full, since it is put on every fall, but as it is a definite information showing for just how long one application of ground limestone will suffice on sandy soil, it was assumed the three tons will be sufficient for three years. The rye crop, accordingly, was charged with one-third of the cost of buying.

Similar results were obtained last year in a test at the farm of Mr. Green, in Lenawee county. The soil on Mr. Green's farm is of a light, sandy type.

In this demonstration three tons of limestone were spread over one acre, and three tons of limestone, plus 250 pounds of acid phosphate over another. The crop on the limed acre totaled up to 15.19 bushels of rye, while the crop from the acre upon which both limestone and acid phosphate were used amounted to 22.82 bushels. The two plots, each, were subjected to each other, so that conditions of soil, moisture, temperature and other factors were identical. The value of the 15.19 bushels was \$27.28, while the value of the 22.82 bushels was \$34.22. After the cost of the fertilizer had been subtracted from the

income, the fertilized acre showed a net gain of \$3.91 more than its unfertilized neighbor. It is well to remember, too, that these demonstrations were conducted under conditions as they are in working practice. In the experiment in Lenawee all the land was limed, making the cost of liming the same on both plots. Inasmuch as the acid phosphate is applied but once in two years, only one-third of its cost was charged against the rye.

The results of these demonstrations are typical of a number that have been run by the soils department of the college so that farmers of Michigan may have some reliable information on fertilizers from an unbiased source. This information makes it reasonably evident that notwithstanding prices which four years ago would have seemed barely short of prohibitive, the use of fertilizers is more profitable today than it was in 1914, while there is in addition a consideration of still more importance to the patriot—namely that every extra bushel of wheat we harvest is just so much more ammunition for battling down the bunkworks of the Kaiser. The connection may seem remote to some, but fertilizers do more than help our farms—the help they give to our country.

Field experiments have shown that fertilizers high in phosphorus content are best for wheat, particularly on the heavy and medium soil types commonly used for this crop.

By other experiments it has been just as indisputably proved that fertilizing adds to the quality of the grain, making it a superior food for man and beast. Often it also commands a higher price in the market because of this improvement in quality.

Here and there a man is encountered who has been led to believe that only run-down land responds profitably to fertilizers. As a matter of fact, land of relatively high fertility, and upon which a good rotation to maintain production has always been followed, and where a reasonable supply of barnyard manure is used, yield plentifully, but give good returns when used on the wheat crop. In case clover does not do well, or where sheep have become somewhat depleted in fertility by grain cropping and lack of manure, the best farmers get about a fertilizer containing some nitrogen, that is 2-9-0, or 1-13 fertilizer. These figures are not a secret code or a set of fabled signals. The first number in the formula, in the 2-9 for example, simply refers to the per cent of nitrogen, such ammonia, which the fertilizer contains, while the second number refers to the per cent of phosphate, and the third to the per cent of phosphoric acid. This is also a good kind of fertilizer to use on high-bred seedling land soils that have been tamed for some time.

No man should allow himself to fall into the error of thinking that fertilizers will make the place of good seed or of a thoroughly fitted seed bed. Good food will help a cow to give more milk—but good food will not make a record-breaker, or even a profit earner out of a scrub animal. The best results with fertilizers are obtained not with scrub seed, but with the pedigreed varieties.

Neither must the importance of the seed bed be overlooked. A good seed bed for wheat is one in which the upper three inches of soil are deep, well-aerated and in good tilth, while the sub-surface should be fine and well compacted, with a good connection established between the sub-surface and the unplowed sub-soil. Early spring fertilizers should be applied in a dry season, to obtain the kind of seed bed that will enable the wheat crop to yield up its maximum returns. When sown after a cultivated crop often gives the best results, for the seed bed produced by the summer cultivation. These conditions should be simulated as much as possible when wheat follows a spring crop. Give a well-fitted and best bed of seed and favorable weather conditions, fertilization with fertilizers high in phosphorus should increase the yields even more markedly than on fields where conditions are the best.

In its last analysis, the question of whether or not it is advisable to fertilize is a purely individual one, but irrespective of this fact, it is one that it will be well for every farmer to investigate.

GOOD SHELTER FOR ANIMALS

Farmers Will Do Well to Make Preparations Before Cold Weather of Winter Sets In.

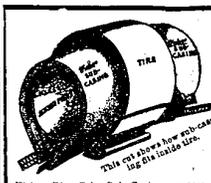
Shelter will be necessary for animals next winter. Those who have animals to winter will do well to make their plans to provide it before winter comes. Animals must be comfortable in a winter and in summer if they are expected to be profitable.

PROBLEM OF SOIL FERTILITY

Food, Clothing and Shelter, Depend on Nitrogen, Potassium and Phosphorus Obtainable.

Conservation of soil fertility is a problem for each of us, and the state and nation is vitally interested as well. The food, clothing and shelter which we depend upon for our existence, phosphorus and potassium in the soil of our farms.

Time for Digging Potatoes. Potatoes may be dug any time after the vines are dead, or earlier if they are not to be stored.



Fisher Rim Grip Sub Casings

More Efficient, Economical and Effective. They save 20 per cent of your Tire bills and free you from blow-outs and 50 per cent of your punctures. They blow the old Casings entirely from Air strain and carry the load. Broken down or blown out Tires when repaired can be run to the last layer of fabric by using

Fisher Rim Grip Sub Casings and they can then be transferred to other old Tires. Get all the wear out of your Tires by equipping them with Fisher Rim Grip Sub Casings. They are made in the U.S.A. Fisher Rim Grip Sub Casings are mechanically correct and not a makeshift or makeshift. Thousands are in use today, and three factories are making them.

For your car owners have been throwing away or selling for junk, many millions of dollars worth of Tires before they were half worn out, but by using Fisher Rim Grip Sub Casings, a great deal of this waste has been eliminated.

STAFFORD & FREELAND

Write for pamphlet. 804 Woodward Avenue, Glendale 2203.

How the Herring Built the Navy. We derive the idea of our defense from the British navy from King Alfred, the first founder of our fleet, who believed in having bigger, faster, better and more ships than your enemy, which is always a sane policy to follow. But Oliver Cromwell really gave us our herring navy when he saw the necessity of taking their sea-trade dominance from the Dutch, which trade was mostly carried by the herring fishery.—Tit-Bits

Work Savers. The plenty of newspapers about the floor when anything is likely to spatter. It is easier to gather them up than to clean up. If there is a kitchen range not in use in the summer time it is well to burn these papers every few days to prevent dampness and rust. If the kitchen has but a gas range, then a good-sized waste basket should be kept and the papers disposed of in whatever way is best.

Women Dive for Shells in Japan. The Japanese industry of making buttons, scarves, shirt studs, cuff links and the like from sea shells brought from the Iugian ocean, the Philippines and the South Sea Islands has made mighty strides these last few years. Millions of the shells are gathered from the ocean bottom by women divers, who work without the aid of any diving apparatus whatever.—From Gas Logic

Germania has discovered one thing about the American soldiers, and that is frightfulness does not frighten them. The correction of a few more mistakes about American ways and methods of fighting are in order for the enemy.

Now somebody, noting that the fool and his money are soon parted, wants to know where the fools get all their money. It would be easier to understand where if the government were ever to take a reliable census of the fools.

It is almost impossible for us to explain exactly what camouflage is, but when a politician has his photograph in his hand it is something like that.

According to Hoover, Americans are eating 10 per cent more than before the war. This explains the tightness of our belts.

Efficiency is becoming scientific. In England authorities refuse burial permits for men until their sugar cards are produced.

When it is intelligently constructed, war becomes a great improvement over the old kind.

No news from the censor, is not necessarily good news. It's just no news.

Our boys are going "over the top" in France. Let us do it at home. Out of the mouths of babes. "Papa," said small Harry, "if you and I were the same size would you say and do things to me that make me fighting mad?"

Epitome of the Man. The spoken word, the written poem, is said to be an epitome of the man; how much more the done work.

Mistaken Identity. The birds supposed rock crystal to be merely ice congealed by intense cold.

It Generally Does. Speech was given to man to disguise his thoughts.—Tallyrand.

Cliff and Cave Dwellers. The cliff dwellers knew nothing of the use of metals. Their knives were made from the bones of the deer, high polished and very sharp. Their household utensils consisted of pottery jars and cases made and covered with a substance resembling modern varnish. Although the earliest cave dwellers were prehistoric, cave dwellers have existed in almost every age of the world. The ancient Horites derived their name from their practice of living in caverns and subterranean abodes.

Cleanness of Chinese. It is acknowledged that the Chinese are very skillful in making confectionery and possess the reputation of having many secrets. They are able to empty an orange of its pulp entirely, then fill it up with jelly without being cut in the rind or even a tiny hole. Indeed, they even empty an egg in this manner and fill it with a sort of almond soup without one being able to find the slightest break or infection in the shell.

DAIRY NOTES

Milk and milk products are the best human foods known.

Cows must have shade during the heat of the day in summer.

A good dairyman does not keep cows; he makes his cows keep him.

Diarthra is the most common form of calf troubles met with in hand-raised calves.

All good dairy cows should be given a name and every cow should know her name.

The pails used in feeding calves must be kept strictly clean and used for no other purpose.

The need of this country is not so much more cows as it is better cows, more properly fed and cared for.

Milk and milk products should be more widely used on all our farms during this period of our nation's food shortage.

Cream spoils when it gets warm. Market or ship cream three times a week in hot weather and twice a week in winter.

Much skim milk which formerly went to the feeding of calves, pigs and chickens must now be utilized for human food.

Constant vigilance is the price of healthy calves, and the feeder must always be on the lookout for conditions of scouring.

Where one has a number of cows and considerable dairy products to market some kind of refrigeration will be indispensable.

It is not reasonable to expect profitable returns from cows in warm weather when they must stand in the hot sun and fight flies all day.

Great care should be taken in washing the milk pails. These should be thoroughly scalded with boiling water, or sterilized with steam if possible.

One of the easiest ways in which to improve the egg production in most flocks is by breeding to strong, vigorous males from winter-laying strains.

Nearly all calf disorders are caused either directly or indirectly by lack of cleanliness, and clean conditions constitute the best preventive of disease in the calf herd.

The most critical periods in the life of the young calf are at the age of four to six weeks, when the feed is changed from whole to skim milk, and six to ten weeks, when the calf is beginning to eat grain and hay.

GUARD STOCK FROM POISONS

In Many Instances Loss of Cattle and Sheep Could Have Been Prevented by Precaution.

Prepared by the United States Department of Agriculture.

Many sheep and cattle have been lost from eastern parts of the country know that lupine is poisonous, and yet they will pasture their animals in a woodland pasture in spite of the fact that laurel shrubs, sometimes a few, at other times many, animals are poisoned.

Other poisonous plants abound in both the eastern pastures and the western grazing lands, many of which are definitely known and easily recognized. A little care and a little knowledge and selecting pastures would materially reduce the deaths due to plant poisoning. Larkspur, lupine, water hemlock, darnel grass, wild cherry, locoweed, white snakeroot, wild sorghum, and oak brush (shiny oak) are the more common plants which exact a heavy toll.

Inorganic poisoning of farm stock is also far from being a new occurrence. Compound salts is definitely known to be very poisonous to hogs and chickens in comparatively small quantities. Soap powder in swill has been the cause of death of swine. Antiseptic tablets and rat poison also have caused deaths among farm animals. Patent rat poisons and even fireworks, have been eaten by fowls, which died later from the effects of phosphorus poisoning.

SUPPLY OF SEED CORN

Prepared by the United States Department of Agriculture.

When corn ripens drop all other seed corn and select abundant supply of seed corn from the standing stalks. The process is too important to be conducted incidentally. The best practice is to give the process your entire attention. Get the very best that is to be had and preserve it well and your increased yield will return you more profit than any other work you can do on your farm.

Weeds in Wheat Field.

Two of the most prevalent annual weeds in spring-wheat fields are the wild mustard and the wild oats. These weeds are enabled to exist because of the fact that the farmer does not retard the land before the wheat is ready to harvest.

Block Floors for Barns.

Block floors for barns are among the effective modern improvements in sanitary feed and dairy barns, stables and hog houses.