

Dairy Facts

HEAT REDUCES FLOW OF MILK

Poor Pastures and Flies Also Contribute to Loss—Main Thing is to Feed Cows Well.

(By C. H. ECALLES, Missouri Agricultural Experiment Station.)
During hot weather the milk flow of the average herd drops down nearly half. The heat and the condition of the pastures common at that time of the year are the main causes of this drop. The flies generally blamed are of much less importance than other conditions. The real cause is the failure of the animals to eat sufficient feed. Poor pastures, heat, and flies may all contribute to this result. It will be observed that during the hot weather the cows will graze but little and come to the barn at night evidently hungry. To produce three gallons of milk a day a cow has to gather at least 100 or 125 pounds of grass. If the pastures are short and the weather hot, generally this much grass will not be gathered and soon the milk flow goes down.

The influence of these summer conditions cannot be removed, but may be improved. The main thing is to see that the cows do not lack food. They should be in the pasture at night and during the earliest, coolest part of the day. If the pasture is short, feed silage or green crops. It is well known to all experienced with dairy cattle that when the milk flow goes down once for lack of feed it is impossible to bring it back to where it was before by better feeding later. To get a high production of milk during the year the cow must be kept at a high level of production all the time. For this reason do not neglect the cows during the hot weather and expect them to come back strong again when conditions become better in the fall. Keep them going all the time.



Results of Good Management.

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FURNISHING WATER FOR COWS

Suitable and Adequate Supply Demands Dairyman's Careful Attention—Avoid All Germs.

All animals require plenty of good, pure water. This is especially true of the milking cow, as water constitutes more than three-fourths of the volume of milk. The water supply, therefore, demands the dairyman's most careful attention. Stale or impure water is distasteful to the cow and she will not drink enough for maximum milk production. Such water may also carry disease germs which might make the milk unsafe for human consumption or be dangerous to the cow herself.

During the winter, when cows are stabled the greater part of the time, and unless arrangements have been made to keep water before them all the time, they should be watered two or three times a day. If possible, the water should be 15 or 20 degrees above the freezing point, and should be supplied at practically the same temperature every day. If a boiler is used for running a separator or for heating water to wash and sterilize utensils, steam from it can readily and cheaply be used to warm the water.—Farmers' Bulletin 743.

NEARBY MARKET FOR BUTTER

Dairyman is Fortunate Who Has String of Private Customers—Give First-Class Article.

It is one thing to produce an article and another to get a good price for it, even when it is worth it. The private dairyman is most favorably situated when he has a good nearby market for butter composed of people whom he knows well. There is no better trade than a private one made up of selected customers, provided the producer supplies them with a first-class article of butter.

Selling to the nearby stores, as many people do, is, for the most part, like giving butter away, unless one can make some arrangement other than the ordinary ones. As a rule, the country merchant pays a very low price for butter, and in many instances it is safe to say that he pays as much as it is worth. The fact is, he often pays more than the poor butter is worth and less than the value of good.

prices paid for months have been... In spite of these prices the animal that possesses the above advantages can still lift mortgages for his owner if the latter



Berkshire Boar.

will study and apply some of the fundamental principles underlying the business.

On the average farm there should be radical improvement in breeding and the care of details during farrowing, weaning, etc. There are many complaints throughout the country either of small litters or else a great mortality in pigs. By keeping the production records of sows and selecting from those that produce and raise large average litters a breeder can raise to its most efficient point the size of his litters. This probably runs between seven and eight to the litter. The hog raiser can prevent losses, other than those caused by disease, by providing proper shelter for the sow at farrowing time. The raiser should always cultivate the confidence of his animals by quiet and humane handling; this care and attention in times of necessity will pay big returns.

SHEEP KILLED BY MAGGOTS

Parasites Develop in Clotted Filth in Wool and Work Well Over the Hind Quarters.

Much injury from maggots on sheep is reported this season. In ordinary years these maggots bother only the lambs, especially following docking and castration, when sores are exposed. The maggots develop in the clotted filth in the wool and work well over the hind quarters if not checked. If undisturbed they become so bad that serious injury and death frequently result. Under favorable conditions the maggots develop in 24 hours.

Each sheep should be carefully examined, and enough lysol or some other dip of practically full strength at the first application should be poured on the maggots. Apply as many times as is necessary to be effective. Then examine frequently, and when the maggots are all killed apply a healing salve so that the skin will keep soft and the wool will grow again.

MARKING SYSTEM FOR LAMBS

Simple Plan Outlined in Illustration Given Herewith—Notches in Ears Indicate Numbers.

This marking system is simple. If you want to mark a lamb as No. 3, make notch in ear where "3" is indicated. The numbers can be com-



Simple Marking System.

lined, as for instance in marking No. 9 where "5" and "4" are marked on the left ear, as shown in the diagram. Supposing the lamb is No. 22, then the right ear is notched at "20" and the left ear at "2."

PROPER CARE OF BROOD SOW

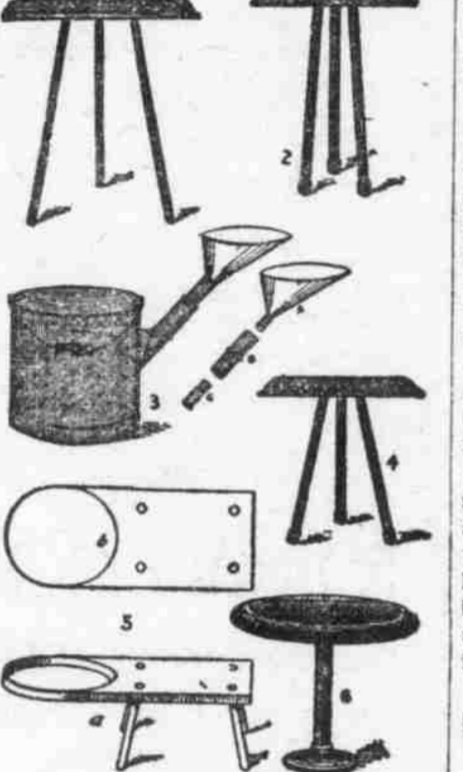
Start Feeding Little Grain About Month Before Breeding Time—Give Oats and Alfalfa.

About a month before breeding time brood sows that have been living on pasture since their pigs were weaned may be started on a little grain. Oats and finely cut alfalfa fed twice a day in amounts which the sow will readily clean up will put them in good condition for breeding.

Larger and more vigorous litters will be obtained if the sow is in a vigorous condition when bred. She should be gaining in flesh at the time, not fat, but just starting to get fat.

When about one-half of one per cent of this acid has been produced, the milk-curd separates and forms a solid mass with clear acid whey about it. This acid preserves the curd by preventing the action of bacteria which would rot the curd and produce offensive odors. Two classes of bacteria begin to grow and multiply in milk shortly after milking: the lactic which sours the milk, and the digesting which rots the curd. The latter class is like the out-plant, in that it is able to grow at a low temperature, while the lactic, like the corn-plant, grows best at the higher temperatures.

Milk which is held at well-water temperature will remain sweet for one



Types of Sanitary Milking Stools.

or more days, depending upon the cleanliness of milking and handling, because the temperature is low enough to prevent rapid growth of lactic bacteria.

This temperature, however, is more favorable for the digesting class of bacteria, which imparts an old, stale odor to the milk, and renders the milk partly unfit for use. If milk is kept on ice almost from the time of milking, there will be but very little development of either class of bacteria, and the milk will be in prime condition after several days.

For the most rapid cooling of milk, the following points should be observed:

1. That cold air is better than no attempt at cooling.
2. That cold water is more rapid than cold air.
3. That an occasional stirring hastens the cooling process.
4. That ice water is much more rapid than air of the same temperature.
5. That a mixture of ice water and salt is the most efficient cooling agent.

To insure pure milk, free from impurities, the utmost care must be taken in every part of the dairy from the barnyard and stables to the bottling of the milk. Absolute cleanliness is essential. Iron milking stools are recommended and they should be kept scrupulously clean.

No. 1 is a good type of sanitary stool made of metal. The ends of the pipes used for the legs are filled with lead, and there are no corners to collect dirt.

Nos. 2 and 4 are similar to No. 1, except that caps are screwed on the ends of the legs, making them slightly more difficult to keep clean.

No. 3 serves for both pail and milk stool. The cover, hoops, ball, etc., make it more difficult to keep clean than the simpler styles.

No. 5 is devised so that one end serves as a receptacle to hold the pail while the milk sits on the other end. As in the case of No. 3, this style is more difficult to keep in a sanitary condition than the simpler forms.

No. 6 is constructed entirely of iron, galvanized after being put together. It is simply constructed, having only a single leg. The base, however, furnishes a larger surface to keep clean. Of the several stools shown herewith, No. 1 is the easiest to keep clean, therefore the most desirable.

BENEFITS OF FALL PLOWING

Soil is Generally in Better Condition Than in Spring—Weeds and Insects Destroyed.

(By J. L. HIERS, Louisiana Experiment Station.)

The soil is generally in better condition in the fall for plowing than in the spring. Fall plowing gives a better texture to the soil and causes a greater liberation of plant food due to the action of the weather. By turning the organic or vegetable matter under earlier it has, of course, more time to rot and to become thoroughly incorporated with the soil.

Fall plowing causes many of the weed seeds to germinate, thereby decreasing this pest the following spring. Many insects are turned to the surface and killed by the frosts.

The time for fall plowing should be largely a matter of convenience. The heavier soils can be safely plowed first. Land with a great deal of vegetable matter to be turned under should be plowed early in order to give this matter more time to rot. In the spring there is not always time for the proper preparation of the soil, especially where the crops are to be planted early, so it is good farm management to do a part of this preparation in the fall.

It isn't always the best plan to plow sandy lands in the fall unless they are also seeded to a cover crop, otherwise there is apt to be much loss from leaching and erosion. It is much more important to put a cover crop on sandy soils than on heavy soils, especially if the land is not entirely level.

BIRDS SPREAD HOG DISEASES

Crows and Buzzards Tear Flesh of Dead Animals and Carry Infection to Neighboring Farm.

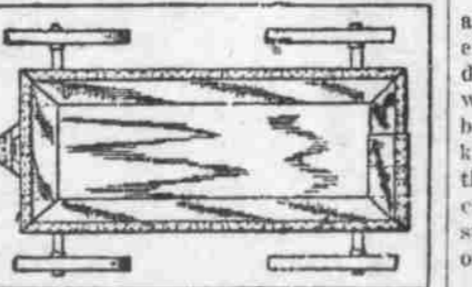
Crows and buzzards are all right where they belong, but they have no place in the hog lot. The buzzards especially are most excellent disease spreaders. Wherever a dead animal of any kind lies exposed for any length of time these scavengers will soon appear. They use their strong claws for tearing the flesh and when they go to the next place carry pieces of flesh and a load of infection with them. If an animal dies of some infectious disease and is left for the buzzards to get at they are sure to carry the germs to their next banquet hall, probably some hog lot 20 miles away.

Throughout the South they are protected because of their value as scavengers, and where they are found in abundance hog cholera prevails—if all the hogs have not already died off. The only way to fight this form of contagion is to maintain such conditions that buzzards and crows will not be attracted.

PREVENTING LOSS OF GRAIN

Wagon-Box Fitted With Lining of Canvas or Like Material Found to Be Quite Satisfactory.

In hauling small grain in farm wagons over rough roads there sometimes is a loss of grain because the sides of the wagon-box are jarred away from the bottom. The box shown here is provided with a lining of canvas or like material, which covers the sides and part of the bottom and prevents this loss. It covers about one-fourth of the bottom around the edges and is attached to the top of the sides by metal hooks riveted to the canvas. At the rear, one end of the lining laps over the other and this permits the box to be emptied readily. To do this the lower part of the tail board is removed and the ends are spread apart.—Farmer's Mail and Breeds.



Wagon-Box Lining.

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