

# Livestock and Dairy

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

**S**ILAGE is the main reliance of dairy farmers in many sections for cow feed, since it has been found to be particularly well adapted as feed in this connection.

While silage is an excellent feed for dairy stock, it should be combined with some other leguminous feed, such as clover, cow peas, or alfalfa, owing to its insufficient productive quality.

The leguminous material will tend to correct the deficiencies of the silage in dry matter, protein, and mineral constituents. A ration of silage and, say, alfalfa hay alone is satisfactory, however, only for cows which are dry or giving only a small amount of milk and for heifers and bulls. Cows in full milk require some concentrated feed in addition to hay and silage, as they can not consume enough of these feeds to keep up a large flow of milk and maintain body weight.

### Experience Is Guide.

The amount of silage to feed a cow will depend upon the capacity of the animal to consume feed. She should be fed as much as she will clean up without waste when consumed along with her hay and grain. Raise or lower the amount until the proper quantity is ascertained. Generally speaking, a good cow should be fed just short of the limit of her appetite. If she refuses any of her feed it should be reduced at once. The small breeds will eat 25 or 30 pounds per day; the large breeds 40 or more; and the medium-sized ones amounts varying between.

Ironclad directions for feeding cows can not be given. In general, however, they should be supplied with all the roughage they will clean up with grain in proportion to butterfat produced.

The hay will ordinarily range between 5 and 12 pounds per cow per day when fed in connection with silage.

For Holsteins 1 pound of concentrates for each 4 pounds of milk produced will prove about right.

For Jerseys 1 pound for each 3 pounds of milk or less will come nearer meeting the requirements. The grain for other breeds will vary between these two according to the quality of milk produced.

A good rule is to feed seven times as much grain as there is butterfat produced.

### Rations Found Good.

The following rations will be found good:

For a 1,300-pound cow yielding 40 pounds of milk testing 3.5 per cent:

Silage	40
Clover, cowpea, or alfalfa hay	10
Grain mixture	10

For the safe cow yielding 20 pounds of 3.5 per cent milk:

Silage	40
Clover, cowpea, or alfalfa hay	5
Grain mixture	5

For a 900-pound cow yielding 30 pounds of 5 per cent milk:

Silage	30
Clover, cowpea, or alfalfa hay	10
Grain mixture	11

For same cow yielding 15 pounds of 5 per cent milk:

Silage	30
Clover, cowpea, or alfalfa hay	8
Grain mixture	5

### Good Mixture.

A good grain mixture to be used in a ration which includes silage and some sort of leguminous hay is composed of:

Corn chop	4
Wheat bran	2
Linseed-oil meal or cottonseed meal	1

In case the hay used is not of this kind some of the corn chop may be replaced by linseed or cottonseed meal. In many instances brewers' dried grains or crushed oats may be profitably substituted for the bran, and oftentimes gluten products can be used to advantage in place of bran or oil meals.

The time to feed silage is directly after milking or at least several hours before milking. If fed immediately before milking the silage odors may pass through the cow's body into the milk. Besides, the milk may receive some taints directly from the stable air. On

## Handling Dairy Sire Needs Care

John Underwood Gives His Ideas on Methods Necessary to Keep Bull in Order.

BY JOHN UNDERWOOD.

**W**HEN the raising of good dairy cattle is to be taken into consideration the bull is the better half of the herd. In a majority of cases this animal seems to possess and is disposed to exercise a head of his own and, consequently, needs careful management and control from the beginning of his calfhood.

I am not sure but that even beyond this period thought should be given to his ancestry in order to possess a knowledge of the traits of character and disposition likely to be developed in the calf.

A vicious ancestry either on the part of the sire or dam will likely sooner or later manifest itself in the young animal and in selecting the one to head the herd this should be carefully guarded against. One special requirement in handling the bull is with reference to his early, thrifty growth and proper development.

### Feed and Care Essential.

Good feed and good care are quite essential in order that a decent and well proportioned animal may head the herd and one that will likely leave a good impress on his posterity.

The calf should be dealt with from the start gently, yet firmly, but never in a teasing or bantering way. He

should be taught to be handled quietly, to be easily haltered and led by the time he is a yearling, and a good ring should be put in his nose to aid in his complete control.

When old enough for service he should not be allowed to run with the other cattle, but be kept in a substantially fenced field or lot. The latter is the best, and can be provided in a reasonably cheap and effective manner.

### Own Method Told.

My own method is to have a lot consisting of about two acres inclosed with a four-foot wire fence substantially put up on good, well-set posts, the posts extending eight or ten inches about the top wire of the woven fence, which is put on the outside of the posts. On the inside of the posts a barbed wire is placed about six inches above the top of the woven wire fence, and one also about eight inches below the same.

In nearly every case this will be a sufficient safeguard against fence throwing or breaking out. The lot is well provided with water and shelter and a strong plank fencing gate protected with barbed wire on the inside, which completes the arrangement. I find in my own case this kind of enclosure sufficient to keep under control a vigorous pure-bred Jersey bull of about 1,700 pounds' weight.

the other hand, if feeding is done subsequent to milking, the volatile silage odors will have been thrown off before the next milking hour. Silage is usually fed twice a day.

### Feed Calves Silage.

Calves may be fed silage as soon as they are old enough to eat it. It is perhaps of greater importance that the silage be free from mold or decay when given to calves than when given to mature stock. They may be given all the silage they will eat up clean at all times. Yearling calves will consume about one-half as much as mature stock; that is, from 15 to 20 or more pounds a day. When supplemented with some good leguminous hay, little, if any, grain will be required to keep the calves in a thrifty, growing condition.

One of the most trying seasons of the year for the dairy cow is the latter part of the summer and early fall. At this season the pastures are often short or dried up, and in such cases it is a common mistake of dairymen to let their cows drop off in flow of milk through lack of feed. Later they find it impossible to restore the milk flow, no matter how the cows are fed. Good dairy practice demands that the milk flow be maintained at a high level all the time from parturition to drying off. It becomes necessary, therefore, to supply some feed to take the place of the grass. The easiest way to do this is by means of silage. Silage is cheaper and decidedly more convenient to use than soiling crops.

The amounts to feed will depend upon the condition of the pastures, varying all the way from 10 pounds to a full winter feed of 40 pounds. It should be remembered in this connection that silage contains a low percentage of protein, so that the greater the amount of silage fed the greater must be the amount of protein in the supplementary feeds to properly balance the ration.

### Interest in Wool.

A pronounced feature of the wool market at present is the growing strength of fine wool prices. Owing to the tendency to breed mutton types a shortage in fine wool has resulted and the price is going upward accordingly. It is said there are no large blocks of fine wool available at present. The London auctions indicate higher prices for fine wool.

Multiplying the height of a wireless aerial by four will give its wave length approximately.



## SAVE

YOUR FRUITS AND VEGETABLES FROM A GLUTTED MARKET With a National Steam Pressure Canning Outfit. Write for catalogue 14.

HENNINGER & AYES MFG. CO., 47 First Street, Portland, Oregon.



## WANTED-FARM LAND

We have city property to exchange for farm lands. Tell us what you have. We will consider livestock, with or without land, will exchange western land for eastern land or city property.

SWANK BROTHERS

611 Northwest Building.

Main 4190.

Portland, Oregon.

Write Us for Information on Market Conditions.

## Dryer, Bollam & Co.

General Commission Merchants.

128 Front Street, Portland, Oregon.

## HIDES

FURS, WOOL, FELTS, HATS, HIBBARD-STEWART CO.

Write for price list and shipping tags. (Please mention this paper.)

IN HEART OF CITY

### Hotel SAVOY

SEATTLE

"Twelve Stories of Solid Comfort"

In the center of things—theatres and stores on both sides. Building absolutely fireproof—concrete, steel and marble.

EUROPEAN PLAN \$1 Per Day Up

Rooms \$1.00 per day up  
Rooms with private bath \$2.00 up

## "Getting the Last Drop"

### Blatchford's Calf Meal

As good as New Milk at half the Cost



100 pounds makes 100 gallons of Perfect Milk Substitute.

Send for pamphlet, "How to Raise Calf Cheaply and Successfully Without Milk."

At your Dealer or PACIFIC COAST CONDENSED MILK CO., Seattle, Wash.

## We Make Large Loans Upon Improved City and Farm Properties

IN WASHINGTON AND OREGON

Making the Mortgage to secure a number of Notes or Bonds of \$100, \$500 and \$1,000 each.

The form of the bond and mortgage is, so far as possible, identical with the small loan where the note and mortgage are assigned to the purchaser.

We have at present several very attractive issues of such bonds, maturing from 1 to 10 years, netting 7 per cent. Let us tell you about them.

Jacob Farth John Davis  
F. K. Struve J. H. Patrick  
V. D. Miller

## DAVIS & STRUVE BOND CO

INVESTMENT BROKERS

807 Second Avenue Seattle

If you want—**FEED DAIRYMEN**  
GRAIN FLOUR SHINGLES  
I Can Save You Money

Write Me. **S. E. GILBERT**  
201 Washington St., Portland, Oregon

**BLACK LEG** LOSSES SURELY PREVENTED!  
by Cutter's Blacking Pills. Low priced, fresh, reliable; preferred by Western stockmen because they protect where other vaselines fail. With for booklet and testimonials. 10-dose package, Blacking Pills \$1.00. 30-dose package, Blacking Pills \$2.50. Use any injector, but Cutter's best. The superiority of Cutter's products is due to over 15 years of speciality in vaselines and creams only. Insist on Cutter's. If unobtainable, order direct. THE CUTTER LABORATORY, Berkeley, California.