



WINTER HANDLING OF THE DAIRY COW

The production of milk in winter is quite a different proposition from what it is in summer. Winter milk will generally bring the farmer about two-thirds more per quart than in summer. To effect this, it costs a lot more to produce it. Winter milk can be produced to a profit in the third and fourth milk zones (that is, 100 to 150 miles from New York and over 150 miles), but to do it the producer cannot go at it in a haphazard, slipshod way. He must thoroughly inform himself as to the actual cost of milk. He must keep a correct account of each item expended. There must be charged against the cow the amount of hay, silage, roots and feed she consumes, at the fair market value; each cow should be credited with the amount of milk she produces, at market prices.

Many farmers will be able to raise from their land all the necessary silage, hay, roots and straw for bedding. It would be a mistake, however, for him not to charge each cow with the amount consumed by her, because he isn't able to buy them. Each has a well-known market value, and if not fed, he can't sell and convert them into cash. To make a success of the business he will be obliged to feed a large amount of concentrates during the winter season.

Every milk producer should have a Babcock tester and know how to use it, and milk scales. At frequent intervals he should weigh and test the milk of each cow to ascertain just how much fat she is producing. If he does this he will find, to his surprise, that some of his so-called best cows are, in fact, his poor ones. In other words, cows producing a heavy amount of milk tested exceedingly low in butterfat. I regard it as fair to take the amount of fat produced by each cow as the basis for calculating the correct amount of feed to produce it, rather than to make the estimate from the amount of milk.

Much will depend whether or not the producer is in a situation to buy his feed during the summer or fall when the price is comparatively low, or whether he will wait until winter and buy it, at retail, at largely advanced prices. Wheat bran can usually be bought during the summer season as low as \$15 a ton in carload lots. It is seldom that the same bran can be bought at any time during the winter at less than \$25 per ton. Here is a profit of \$7 a ton, or nearly 50 per cent, on a dollar. Probably not one farmer in a hundred would consent to accept a loan of money, stipulating that he should pay 50 per cent interest. He would rightly say that it meant his ruin, but thousands of farmers, perhaps the greater majority of them, are doing just this thing in buying their mill feeds. They pay 50 per cent for the use of money for less than six months instead of a year.

Gluten feed, hemlin, or meal, cottonseed meal, corn meal and other concentrates can be bought at a like saving by taking advantage of the market. A serious objection can be made to this plan; namely, that the average farmer would not be able to buy and pay for a carload of feed at one time. This is probably true, although it would be economy for him to do it, even though he should have to borrow at 6 per cent, but this difficulty can and should be overcome by concentration of effort. Instead of one dairyman buying a carload, four or six in the same neighborhood should band together and buy their winter feed in carload lots, when it is low-priced, and store it for winter use. This would not overtax anyone. The feed comes in sacks, so that it can be easily divided to the mutual advantage of the buyer.

Much has been said in the press and on the platform regarding the balanced ration. Cows can be fed more economically by giving them a ration fairly balanced in fat and protein, than by feeding them an unbalanced ration. During certain seasons our agricultural papers give every week formulated dairy rations properly balanced according to expert standards. They are useful as a guide only. I would not advise that these formulas be followed too closely. Some years certain dairy feeds are relatively higher than others. I advise the dairyman to take advantage of the market and buy those which are cheaper. There is no trouble in getting a fairly well balanced ration where this is done.

For instance, suppose that wheat bran and gluten are low as compared with other feed stuffs, buy them, feed half and half by weight. This supplement with corn silage clover and timothy hay will make a ration

well enough balanced for all practical purposes. In the same way, if oats should be relatively low and bran and gluten high, I would advise buying oats and some buckwheat middlings and feed them half and half by weight. That will make a milk producer and keep the cows in good condition. If the farmer can raise on his land sufficient feed for his cattle, he should by all means do it. When compelled to buy, the farmer should study the markets and keep posted as to which feeds are cheapest, and buy accordingly.—ARCH E. VANDERVOET in *Milkman* Farmer.

Horse as Poor as it's Foot

In buying a horse for any purpose it is important to know that the animal's feet are sound. The horse is a native of the grassy plains of the world, and the things we have been doing with him under conditions of civilization have resulted in some strange diseases and weakness of the feet. Hard roads, continual shoeing, etc., have combined to produce cracked hoof walls, side bones, ring bones, coffin joints, contracted heels, lameness and other common and uncommon troubles in the hoof of the modern horse.

Shoeing is almost as necessary for the modern work horse as his daily ration, but a great many of the foot defects so discouragingly common may be traced back through the generations of shoeing. Careless and ignorant shoers continue to ruin the feet of horses, and owners have become surprisingly indifferent.

The foot of a horse is not all a block of horn. On the upper side is a different kind of horn from that of the bottom side, with a spongy triangle called a frog. Inside this box of horn is a bone of a shape much like that of the foot in which the bones of the lower part of the leg terminate. The back side or rear end of this triangular bone terminates in the point or frog.

Now when a shoe is too wide at the heel it presses the shell of the foot in against these wings, and when the shoe is allowed to remain on too long and the shell of the foot grows over the shoe, or the shoe bears on the sole of the foot, it brings direct pressure in the parts over the ends or wings of the coffin bone. So in either case it is the shoe which being improperly adjusted, pressing unduly upon the wing of this bone that produces an injury. Sometimes it will be manifest in a little red spot in the sole of the foot when it is pared to level the shoe in shoeing, at other times there is no red spot.

Storing Squashes for Winter

Squashes must be well matured before harvest, and should be cut or very carefully broken from the vine, leaving the stem attached to the squash. Cutting the stem is much preferred, for there is less danger of injuring the squashes. If possible, they should be placed in small piles to ripen or harden up for two or three days before the hauling from the field. In hauling, spring wagons ought to be used, with the wagon body lined with burlap or other material to prevent bruising.

The storage room must be dry and moderately warm, at least for the first two weeks, to harden up the shells, after which a lower temperature, providing the room is dry, may be maintained. Injuries lead to decay, and as squashes are very sensitive, they should be handled like eggs. Broken stems and bruised skins are sure to open the way for decay.

Electrical Farming

Norway is fortunate in having many waterfalls to furnish "white coal," or electric power, at very low cost. At an agricultural exhibition at Christiania visitors saw a model farm at which electricity does much of the work. At night the farmhouse, yard, stables and sheds are brilliant with electric lights. Electric stoves do all cooking. A small motor runs a coffee mill, a k life pollisher, a fruit parer, a sausage mill, and a bread cutter. There is an electric dish washer, a clothes washer, a centrifugal drier, an electric mangle, and electric irons. In the workshop there are a bath, a saw, a grinders, a glue heater and a soldering iron, all driven by electricity. In the stable an electric motor runs an apparatus for rubbing down horses and for shearing sheep. By way of climax the fields of the farm are fertilized with artificial manure made at the Norwegian electrical nitrate works.

Fall Care of Sheep

The approach of winter lessens the supply of nourishing roughage in the field. For the health of the sheep, however, and also for the saving of feed, they should be given free range over all fields possible, as close confinement of the ewe flock is quite detrimental to their best health. Good nourishing rough feed with exercise and some clover hay at night, if the fields are thin, will be a very sure forerunner of strong, healthy lambs.

Many farmers have pumpkins which are a great wish for sheep. These cabbages and roots of different kinds are also good. For a heavy growth of good only wool, we must always supply a little succulent feed along with their hay and straw. A limited amount of well matured silage, a few pumpkins, cabbages, turnips, rutabagas or potatoes help wonderfully.

As the winter settles down and the sheep must be yarded closer, they need more attention. The disease of the feet, dreaded by all shepherds, footrot, quickly works havoc where the sheep's feet are left to grow long and they are penned in muddy yards. Cut the loose dirty wool from their tails; give them this necessary attention for it will be worth more than an insurance policy to you later. In arranging for a winter shed for your flock, realize that all a well woolled sheep needs is a dry, well ventilated roof and windbreak. Give them a place of their own where all other stock cannot molest or tramp on them. Sometimes we are tempted to be more humane and provide good warm comfortable quarters for winter for sheep as we do for other stock, more especially we are beginners in the sheep business. Consequently they sweat, and when turned out in the morning the contact with the cold air gives them a heavy cold.

Do not compel sheep to wait from one Sabbath until the next for salt as some farmers do, but have a trough where they can get it any time and where it will be nice and clean. It has been said that sheep require no water when pasturing but do not listen to such inhuman folly. On very succulent grass an ewe when the weather is not extremely hot they will live without it or take only very little, but they should always have water when they desire it, for like other animals their systems require it. This is especially true during suckling season and sheep above all animals should never be compelled to drink from stagnant pools. The successful shepherd is quick to see if any of his flock is illing and quick to separate such and give extra care. Usually a very sick sheep may be counted a dead one, therefore the great necessity of judicious care to prevent illness. Rains often lose vitality when running alone in the fall in sight and hearing distance of ewes and will sometimes wear a path along the fence fretting and losing flesh until they are in the poorest possible condition for service when the time comes. Put a few vetch lambs with them, keep them out of sight of the ewes; put up a trough and feed them oats every day.—O. V. J.

To Cure a Kicking Horse

Various expedients are used to cure a kicking in the stall. A sack of straw hung by both ends horizontally from the ceiling so that it reaches just behind and above the horse's hocks, often proves effective. Tie the horse strongly and short, hang the sack of straw in place, and let him kick and get scared until he gets tired of it. Others have been broken by wrapping a short chain in an old sack so that it cannot bruise the legs and then tie this to a hind pastern. Others have been reformed by putting on a bridle and surcingle and then running a rope from each hind foot to the bridle bit. That is very severe, but effective.

Pure bred dairy cattle will often be the keynote to great profit from the farm. What is the use of keeping an indifferent, non-producing animal of any description when one that will take no more room, no more care, and no more feed?

The cutting box or feel cutter is a valuable asset to a stock farm in a year when feed is scarce, such as this. Stock of all kinds will waste very little cut feed or cut bedding, with the result that a given amount of straw or hay will go farther when cut than if used whole.

Beware of Teas that are dusty and full of broken leaves, as these are injurious in use and unpleasant in the cup, the dust being generally put there to reduce the cost. "SALADA" Teas are always fresh, fragrant, free from dust and economical in use, preserved and sold only in sealed packets at 35c, 45c, 55c, 65c per pound.

Four Days Course In Agriculture

Farmers of North Shore Will Receive a Free Course of Lectures and Demonstrations

The New Brunswick Department of Agriculture will hold a Four Days' Course at Newcastle, December 1st to 4th, 1914. This marks the inauguration by the Department of its system of agricultural short courses in the North Shore section of the Province.

It is the policy of the Department to bring agricultural instruction as close as possible to all the farmers of the Province. With this end in view short courses have been arranged in three centres this year, namely, Woodstock, Sussex, and Newcastle. The course at Newcastle is planned to serve the counties of Restigouche, Gloucester, Northumberland, and Kent.

The programme for this course covers almost the whole range of agricultural interests, including live stock, dairying, poultry, field crops, soil management, horticulture, weeds, insect pests, plant disease, farm engineering, and rural economies. In the limited time only a brief survey of the various subjects will be possible, but an effort will be made to select the most important and fundamental points for consideration. Farmers should come prepared to discuss their practical problems, as well as those of their neighbour, under the leadership of an expert. Practical demonstrations and lantern lectures will be features of the course.

The major portion of the work will be carried on in the Town Hall of Newcastle, but for the stock judging work the class will adjourn to the Armoury.

It is the aim of the Department of Agriculture to make this course as accessible as possible to all the farmers of the North Shore. It is arranged at a time of the year when they can conveniently leave home for a few days of valuable instruction and demonstration. The course is entirely free, and there is no age limit. The Canadian Government railways are co-operating by offering reduced rates upon the standard certificate plan, and the only other cost to students will be their living expenses while in attendance.

The men of the Department who have the work in charge will spare no effort to make the work interesting and profitable for those who attend. It should be remembered that a great deal of trouble and expense is being incurred in the effort to make this course something really worth while, and any farmer or farmer's son who is anxious to increase his store of practical knowledge can hardly afford to miss the opportunity.

R. NEWTON,

Director of Agricultural Schools,
Woodstock, N. B.



Tenders for Motor Patrol Boat

SEALED TENDERS addressed to the undersigned and endorsed "Tenders for Motor Patrol Boat" and accompanied by an accepted cheque for 10 per cent, of the amount of the tender, will be received up till noon on the 25th November, 1914, for the construction of a Motor Patrol Boat for Fisheries Service.

Specifications and plans may be had on application to the undersigned or to the Agent of Marine and Fisheries Department, St. John, N. B., or to the Naval Store Officer, H. M. C. Dockyard, Halifax, N. S.

G. J. DESBARATS,
Deputy Minister of the Naval Service,
Department of the Naval Service,
Ottawa, November 2nd, 1914.

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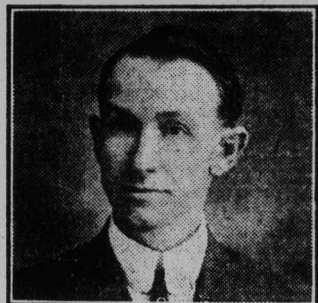
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Union Advocate

ESTABLISHED 1867

one of the oldest papers in the Maritime Provinces. You say you never did advertise, and you do not believe it pays. Don't you think you are giving your own opinion rather a high rating when you put it against that of the great majority of those who do advertise? Surely majority is a better judge.

Do not let your mind rest too strongly on the amount of money you would have to pay; rather think of the increased business which is sure to be yours. You say you do not want any increase, because you would have to increase your staff. Well, if ten new customers came to your store every week would you turn them away? And if that number increased until you had to enlarge your staff of clerks, would you not do so, or would you neglect them? You would certainly increase your staff, attend promptly to your new patrons, and keep your stock of goods on the move, so why not make up your mind to-day to take a space in this paper and keep your name constantly before the buying public.

As an advertising medium, The Advocate is firmly taking its place at the head. If you, Mr. Merchant, are not among the number who are using its columns, why not talk the matter over with our representative and select a good space while you have a chance. We are at your service any time you wish to consult us, and would only be too glad to quote you rates. A telephone call will bring our representative to your store in ten minutes.

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