More Money in Winter Dairying.

A good many fellows are toiling away sixteen and eighteen hours a day on the farm because their system of farming is wrong. By equalizing the crops and farm herds, they could be busy less hours all the year, and not half kill themselves during the hot summer months. And they would make more real money, too.

To illustrate: Dairy farmers have just passed through a period of very strenuous field activities and of heavy milking with their herds. Now, when field work is lax, many will be idle one-third of the time, because their herds will not freshen. In fact, on some farms the term idleness might be used instead of freshen. A more even balance in the year's work can be brought about if the cows are bred to calve in the fall. The logic of this is very plain; as the work of caring for the cows draws to a close, the busy time in the barn opens. The cows will be coming fresh at that time. There will be plenty of time for giving them any needed attention, and for looking affer the young calves.

Records show that under the system of having cows calve in the fall from twelve to twenty per cent more milk is secured during the course of the year. The price received is higher, too. High profits are insured, because under this sort of management the cows are yielding their maximum production at the season of highest prices. It is true that milk and milk products cannot be as cheaply produced on high priced feedstuffs as on pasture, but the increased price and greater ease of handling the milk during the cool season, with the subsequent saving in labor, far outweighs the advantage of the grass.

One of the greatest arguments in favor of fall freshening is that it balances the work of the farm to a nicety. The cows commence to come fresh about the time the heavy work on the farm is completed for the year, or along about the middle of November or the first of December. The dairyman is in a position to devote all his time to making the herd pay profits. In this manner the farmer provides himself with productive and profitable work for the entire year, and does not "kill himself" with work for a few months.

Usually the milk flow begins to fail by the time the spring farm work opens, the dairy work is consequently lighter and can give place to field work. By June the cows start to go dry and by the time the grass pasture fails in the fall there is very little "cow work" and plenty of farm work. The dairyman, however, can make good use of the pasture while it lasts, for the cows respond to it and the dairyman is rewarded with an extra flow of milk before the cows go on their summer vacation.

It is highly important that the dairy cow be encouraged to do her best during the first part of the lactation period, for to a certain extent she will strive to maintain the pace set during the first few weeks. The dairyman, for this reason, should be prepared to give the cows the best of care at this time, as his future season profits depend upon it. More can be accomplished toward producing the very highest flow of milk in the fall or early winter than in the spring. This theory is based upon the fact that the cow's system becomes sluggish through the winter, due to artificial feed, close confinement and other abnormal things, and that she cannot respond in the spring like she can after a summer's rest on pasture and under more normal circumstances. And it sounds reasonable, while the profits of the men who follow this type of herd management demonstrate that is it.

The farmers who have made comparisons advise that calves dropped in the fall are easier to raise and make better cows than those born in the spring. The first six or eight months are the most important period of the dairy cow's life. The farmer may devote more time to his stock in the fall than in the spring, without neglecting other pressing work. Besides, it is far easier to prevent such disastrous diseases as scours, and other digestive troubles among the young heifers during the cool weather, because the farmer should be better able to supply a uniform quality of skim-milk and to combat all forms of disease-producing germs. Calves carried through the winter on a skim-milk, grain and clover hay diet are ready to be turned on the pasture grass in a slick and growthy condition. Contrast this with the old method of allowing the heifer calf to struggle along during the summer as best she can with lack of care and attention until winter, when she has all she can do to hold her own, even on good feed, because she has received a poor start. Several farmers attribute the increased quality of their herd to the fact that they were able to properly care for the calves, fall born.

But winter conditions bring their own problems and difficulties, yet there are also some possible advantages beside those mentioned. While the herd has to be kept under artificial conditions, these are usually more likely to be under the control of the feeder than is possible at other seasons. One would be the manure, which is more valuable during the period of feeding concentrated feeds. None need be wasted, since all may be spread directly upon the land, instead of the cows carrying this valuable fertilizer to the pasture, and then buying commercial fertilizer to replace its value for the meadows.

The ideal dairy ration for winter feeding must possess succulence. The silo solves the problem best and from all points of view silage is to be preferred. The second choice would be roots. These are quite satisfactory, either alone or as supplementary to silage and by all means should be more generally fed than at present. Lacking either, it is important to secure similar effects through the grain ration with the aid of alfalfa or clover. In this connection oil meal is of great value because of its laxative qualities, coupled with its high protein content.

In the absence of silage or roots a grain ration something like this should be used: Bran, forty parts; ground oats or barley, twenty parts; corn meal, twenty parts; oil meal, twenty parts.

And in mixing the rations a pair of farm scales will aid in adding profits, weighing the grain for each cow and the milk that she produces. It is usually admitted that occasional weighing is worth while as showing whether a cow is a "boarder" or not, but those who have kept a complete milk record realize the value of such a method to the feeder.

It is a safe rule to feed ten to fifteen pounds of hay, twenty-five to forty-five pounds of silage, or thirty to fifty pounds of roots, varying the quantities according to the size and capacity of the cow. In addition, one pound of the grain mixture should be fed for every three or four pounds of milk produced. If a cow tends to fall off in production without gaining in body weight it would seem that she is not eating enough, but if she gains in weight at the expense of production it is apparent that she needs more protein, relatively, in her ration, or maybe she is the wrong kind of a cow. A good feeder will not allow a cow to run down and become too thin. If she tends to "go too much to milk" she can stand a wider ration, that is, more fattening feeds in proportion to those richer in portein.

The profitable feeding of dairy cows consists of supplying them with plenty of well-balanced, palatable feed, in surroundings which afford them health and comfort. Nature gives the dairyman a model in feeds in the month of June and this is recognized to such an extent that the very words, "June pasture," suggests the ideal condition for producing milk and butterfat of the highest quality and in greatest abundance. The dairyman should, therefore, endeavor to extend these more ideal conditions throughout as much of the year as possible, and will succeed just as far as he recognizes and applies the factors which go to make up the ideal conditions.

In the first place, the common grasses supply all the required nutrients in the proper proportions. Besides, this forage is relished by animals to such an extent that they will consume it almost to the limit of their capacities. Then again, pasture grasses are succulent and so keep the digestive system of the animal in a laxative condition favorable for the very best action of the organs of digestion and assimilation. We must not forget that animals on "June pasture" are supplied with an abundance of fresh air and sunlight, not to mention pure water at will.

And the man who follows the winter dairying program finds that it aids in solving the labor problem. It makes the working hours of summer shorter and more regular, and provides steady work during the winter, thus keeping some of the good men from drifting to the cities after the rush spell is over, which occurs on those farms without a well planned season's program for both winter and summer.

INTERNATIONAL LESSON. JANUARY 18.

**The Boldness of Peter and John—Acts 4: 8-21. Golden Text—I Cor. 16: 13.**

1-4. The Arrest. Peter's speech (3: 11-26), added to what had gone before, brought matters to a head. The Jewish leaders were both offended and "sore troubled" by the charge that they had been the slayers of an innocent man, who was the expected Messiah, and by the publicly repeated declaration that this crucified man had risen from the dead. The two apostles were interrupted in their teaching and were carried from the temple court to prison.

The priests who interfered were the temple authorities. The "captain of the temple," himself a priest and commander of the temple guard, was their officer and agent. The Sadducees, who did not, like the Pharisees, believe in the possibility of resurrection from the dead, had both a rligious and a political reason for opposing this new doctrine. For they feared that it portended a revolt against the Romans, under whose rule their position in the priesthood and their authority in the Jewish council, was guaranteed. But in spite of opposition and the persecution now beginning the number of converts increased and came to be "about five thousand."

5-12. Peter's Defence. "On the morrow." Peter and John had spent the night in prison but they were undaunted. They were now summoned before the great council, which represented rank and office and learning. Annas had been high priest in A.D. 7-14, and was still called by that name, but the office was actually held at this time by his son-in-law Caiaphas. The question which they asked Peter, "By what power, or in what name, have ye done this?" gave him the opportunity for his spirited and splendid defence.

Peter was clever enough to put in the very first words of his speech the fact that it was "concerning a good deed" he and his fellow apostle were being examined. But he added the bold declaration that it was "in the name of Jesus Christ of Nazareth" the man was healed. Most aptly he quoted the saying of Psalm 118, originally referring to Israel, declaring that it was fulfilled in Jesus Christ, who had been rejected and crucified but was now triumphant and exalted. The head stone of the corner means most probably the corner foundation stone, so important to the stability and strength of the building. Compare Eph. 2: 20 and I Peter 2: 6.

"In none other is there salvation." This statement is made, it must be remembered to Jewish rulers and councillors who cherished the hope of a coming King and Saviour for Israel, "Your King has come and you have rejected Him." Peter tells them. And there is no other and will be no other, a statement which history has abundantly demonstrated. The Saviour they failed to recognize in Jesus has never come in any other person or name. But it is both foreign to Peter's meaning, and dishonoring to the love of God revealed in Jesus Christ, to hold that this means absolutely no possibility of salvation for those before or since, in many lands, who have never heard the name of Jesus. So monstrous an assumption is entirely out of harmony with both the spirit and teaching of the New Testament.

13-22. The Judgment. The only explanation which they could give for "the boldness of Peter and John," and for the readiness and ability which they displayed in their defence, was "that they had been with Jesus." It was a very good and very true explanation. Moreover, the man who was healed was standing with them. Their eyes furnished the proof.

"A notable miracle" had been wrought and could not be denied. So the council resorted to an injunction, forbidding the apostles to speak or teach in Jesus' name. As well might they have forbidden the Jordan river to flow from the springs of Mount Hermon, or the flood tides of the Euphrates to keep within its narrow banks. The hearts of these men were filled with a great message, and inspired by the Holy Spirit of God; they could not and would not keep quiet about it.

23-31. The Appeal to Prayer. In their trouble the little company of Christians resorted to prayer. They all prayed "with one accord." It was a very definte and real appeal which they made to the Lord, the Creator of heaven, earth and sea, Inspirer of the ancient seers that He would see the conspiracy against both Jesus and His followers on the part of the rulers, and would give them boldness to continue to do their work. They quote from the second Psalm a passage in which opposition to the Messianic King is foretold, regarding it as now fulfilled. And they pray that, together with boldness to speak and to bear witness, they may have power to do such "signs and wonders" that opposition will be confounded. Their united prayer brought a second invasion of spiritual power. The injunction of the Sanhedrin was defied, and the good work of spreading the gospel went on apace.

## Hogs

With high prices still good in spite of the break from last summer's high mark, maintenance of health more than ever before is concerning the farmer. Everything possible is being done to save each pig produced and have it grow into "big money." To this end veterinarians are busy everywhere vaccinating against cholera and hemorrhagic septicaemia or swine plague, and of late have also been injecting mixed bacterins to prevent or cure mixed infection which has killed thousands of pigs. But these are not the sole means by which diseases of swine may be prevented. Sanitation is the sane, sensible, necessary measure against disease. Drugs never can succeed alone. Serum therapy must fail unless dirt is vanquished, and the environment of hogs everywhere made sanitary and conducive of health.

External and internal parasites are the bane of the hog business and dirt largely explains their prevalence. Do away with dirt, and parasite diseases will lessen and eventually die out. And with the disappearance of dirt will go most of the dieases caused by the filth germ, sore, mouth, skin disease, and bowel trouble. Dirt, too, paves the way for cholera and dysentery.

Address all correspondence for this department to Mrs. Helen Law, 23 Woodbine Ave., Toronto.

Lucille: Here is an almost certain solvent for misunderstandings. It is simply this: Get the other person's point of view. This is not easy, for most of us would lots rather harden our hearts, and shut our minds and feel abused and hurt and wronged because in every one of us there is a little secret love of martyrdom. Do you believe that, Lucille?

If we could only make a special effort to put ourselves, mentally, in the other person's place, to see his side, no matter how wrong it may appear to us, it is surprising how quickly it will soften and dissolve that hard, bitter feeling. The old, old saying that it takes two to make a quarrel, is one of the truest things ever written. Even if we feel that we are a little more in the right, the ability to get the other person's viewpoint helps wonderfully in suggesting the right attitude towards her, though it may not bring us to the point of holding out the olive branch. Try it, Lucille?

Mary: "Is a girl twenty-three years old, too old to go to school?"

I do not believe we are ever too old to go to school, if we just have the desire for education. The letter in which this question was asked, twisted my heart strings a bit, for the girl who wrote it has had that hardest disappointment of all to bear—thwarted desire for an education. You girls who have your chances of schooling simply "handed to you," so to speak, may be a bit more appreciative of your opportunities after you read this:

"I am one of those girls who had to give up school to help at home. I am twenty-three and it is impossible for my mother to get along alone. Do you think I am too old to go school again in case I could? Every year, my hopes of again starting have faded. Most of my school mates and cousins had a good education and are now earning their own living and doing something worth while."

"Doing something worth while!" My dear girl, you are doing something just as worth while as any of them; perhaps more so than some because you are adding sacrifice to your daily work. But your time will come, I feel sure, if you but wish and work hard enough for this end and your education will mean all the more to you. Keep your hopes high.

Bride of 1910: For a "tin wedding" write your invitations on correspondence cards, choosing those which have a silver edge, and wrap the cards in tin foil before placing them in the envelopes. For table decorations, arrange a floral centrepiece in a bright tin pan and use candles in tin candlesticks. Instead of lace or linen doilies, use squares of silver paper and serve all the food possible on, or in, tin dishes. Little tin toys which will hit off the occupations or characteristics of your guests, would make appropriate favors. Ask the men to write descriptions of their wives' wedding gowns and the women to write ideal proposals. Allow ten minutes for the effort, then collect the papers, read them aloud and give prizes for the best and for the poorest.

Subscriber: What garments are needed for a complete wardrobe? Please mention materials suited to a person of limited means. The style books mention only the richest fabrics.

A complete list for the wardrobe depends upon the mode of living and place of residence. A woman living in town or engaged in business requires a different wardrobe from that required by a woman on the farm.

A simple wardrobe would include enough changes of underwear and working or house dresses to allow one to be always sweet and clean without having to launder any of the garments between wash-days; two pairs of shoes for general wear are advisable, as it rests tired feet to change the shoes, then there should be a pair for better wear; afternoon dresses for summer wear of percale, voile, gingham or chambray; or if you prefer, have white skirts and shirtwaists, as many as may be needed.

A dress of foulard silk, satin or crepe de Chine will be nice for dressy occasions, and a serge dress in dark blue or any other becoming color, with plain woolen dresses, or skirt and flannel shirtwaists for winter wear. A cloth suit with blouse of crepe de Chine or satin to match, and long coat for driving and bad weather should be included. A scuff hat and a best hat for each season, a sweater, a cotton kimono for summer use, and flannel bathrobe for winter use, and bedroom slippers, are considered necessities.

Many of these things will last for years, and the wardrobe can be added to gradually; not everything needs to be bought in one year. When you go shopping buy what you can afford, but avoid the flimsy materials, selecting the best you can get for your money. If style books call for tricolette, a very expensive fabric, choose serge or foulard, either of which will cost less, wear better, and be more suitable. Good cotton underwear will wear better than lisle, and crepe will wear better than nainsook. Muslin and longcloth are more serviceable than batiste.

Study materials, compare samples and prices, and keep a record of your purchases. You will soon learn what you can afford and what you can not afford to buy.

Perplexed: By way of reply to your letter I am going to tell you about sixteen-year-old Ellen, hoping the little story will help you to see that there is such a thing as a selfish sacrifice, and to show you that it is necessary to watch the nature of your friendships. Ellen came to the writer one day with her eyes full of trouble and her voice plaintive.

"Mary Perkins wants me to 'give up' the Rice girls," she said. "She says they are coarse. They are a little loud sometimes but I do like them awfully well for they are so good hearted and I just don't know what to do. Do you remember how they helped me when mother was sick?"

"Give them up my dear!" I exclaimed, "Is not your heart big enough to hold all the people in the world?"

"Well, mine is—" she hesitated.

"But Mary's is not," I finished for her.

"You see, Mary has had a hard time all her life. She has not had any mother and she had such a struggle with her father to let her go to school and being alone so much on their big farm, perhaps she has grown morbid. You know I have tried to make her happy because I feel so sorry for her and when she gets unreasonable like this, it is very hard. She becomes jealous of the Rice girls and others of my friends. The other day, I wanted to go to the Moore's party and Mary was not invited, so I felt I ought not to go either."

"My dear girl," I said, when Ellen paused for breath. "You are wronging both yourself and Mary in encouraging her ideas of friendship. Now do not say I do not appreciate your lovely spirit, for it is splendid of you to 'take up' Mary's cause but before you go any further, you must have an understanding with her that you must keep, your old friends and live your own life. You are encouraging her in selfishness and dependence by giving up your right pleasures because she says you must and you are forcing yourself into an unhealthy martyrdom. Moreover, before you know it, you will lose your own individuality and independence of thought and action. I fear Mary is a parasite, and by that I mean a person who feeds upon another's loyalty and devotion and sympathy and gives nothing in return but a very selfish love. For Mary's sake if not for your own, you cannot continue this. Mary will not always find a dear little Ellen to champion her cause. She will have to learn to stand by herself and in the meantime, is Ellen developing the best that is in her by molding her life to suit another person's whims and desires? Is she realizing to the full her God-given powers to aid and inspire others?"

I am afraid I did not entirely convince Ellen, but I did open her eyes and maybe the truth will dawn upon her. Or, she may see the truth but not yet have courage to obey it. She may have to see this experience through to the bitter end to get its full lesson. Many of us learn only in this way.

## Poultry

An egg is over half water. It is only natural that the heavy-laying hen should consume considerable quantities of this essential yet cheap material. An authentic instance records that a flock of 90 pullets consumed between 7 a.m. and 3:30 p.m. one February day six gallons of water. At the latter hour the three-gallon fountain was refilled with tepid water, and considerable additional water was consumed before the pullets sought their roost.

This pen of pullets were not loafers, either. Their production for this winter month averaged 62 per cent.

There can be no question that a low winter egg yield is due often to a flock consuming insufficient water, as it is certain to do if the water is ice-cold. Bungling of the water problem in winter is characteristic of indifferent poultry management. Non-freezing fountains, some heated, others not, are obtainable everywhere. Or the ingenious poultry keeper can improvise a special winter water container to suit his needs. One such device is made of a galvanized iron pail fitted into a box, and surrounded with sawdust or other insulating material. As it is sometimes necessary to thaw with hot water, metal containers are preferable to the heavy earthenware types for winter use.

It is always best in cold weather to furnish water with the chill taken off. Any water found in the containers at refilling time should be thrown out.

"Indulge not in vain regrets for the past, in vainer resolves for the future—act, act in the present."—F. W. Robertson.


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