

Soils and Crops

By Agronomist.

This Department is for the use of our farm readers who want the advice of an expert on any question regarding soil, seed, crops, etc. If your question is of sufficient general interest, it will be answered through this column. If stamped and addressed envelope is enclosed with your letter, a complete answer will be mailed to you. Address Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

Summer on the Dairy Farm.

The misty morning air, noonday heat, balmy evenings, murmuring brooks, soft breezes, luxuriant herbage and lowing herds are phrases for poets, not dairy farmers, to conjure with. The man who provides means for contenting against the hot, blistering sun, flies, drought, stagnant water, declining milk yields and loss of flesh condition finds more loss than poetry in the management of dairy cattle during the summer months. Farmers have learned to care for cows better in the winter than in the summer.

To maintain a cheap and satisfactory flow of milk, pastures must be supplemented with some cheap, bulky food as well as grain. Dairy farmers are finding the silo an invaluable value in avoiding summer losses. Silage feeding in many localities has reduced milk losses and solved the problem of maintaining the cattle in a thrifty, flesh-gaining condition during the summer. During recent years thousands of dairy farmers have avoided losses which formerly amounted to from twenty to thirty per cent. and the expenses for silage were repaid two times over in the actual saving of flesh condition and growth of the animals. The summer silo marks the elimination of drought losses from the accounts of the dairy farm.

With silage at hand one may rely on pasture simply to supply its crop of feed—a contribution to the ration which is completed whenever necessary by additional feed. More uniformly profitable milk yields and growth of young stock are thus secured in spite of the eccentricities of the weather. With the losses from drought eliminated every possible pound of feed is made into milk, growth and fat.

Next to feed, water has the greatest influence upon the flow of milk and the health of the cattle. Cows should have as much water as they will drink during the summer. The supply should always be pure. The drinking of impure water not only has a deleterious effect upon the milk, but it leads to parasitic infection which lowers the cow's vitality and lessens the flow of milk. If the water in the pasture cannot be procured from a clean spring or running stream it should come from a deep well that is not subject to surface drainage. The same principles apply to the quality of water used for washing dairy utensils. Impure water used for washing utensils is a frequent cause of bad flavored milk. Of the inorganic foods perhaps the only one that needs to be supplied is common salt. The other constituents are present in sufficient quantities in the food and water.

No one thing will do as much toward insuring a high grade of milk during the summer months as keeping the utensils clean and sanitary. Milk may be produced in any ordinary farm from healthy, well-fed cows and drawn in a cleanly manner, but the good effects of such care will be wasted unless it is extended to the utensils. The various kinds of bacteria are unusually active in warm weather. Many thousands may be concealed in a crevice so small that it can hardly be seen, and if these get into the milk they may increase more than one thousand fold within twenty-four hours. A little milk left in the seams, or about the rim of the pails and cans harbors thousands of bacteria, and their injurious effect is sure to be great if the conditions are favorable for their development.

There seems to be a general tendency on the part of dairymen to neglect sanitary conditions about the premises during the summer. While the work in the field is pressing, the gutters are allowed to become full of manure, the alleys scattered with litter, the windows and walls dirty and covered with cobwebs and a general air of neglect is apparent. Special effort should be made to keep manure cleaned up about the stables and yards during warm weather. Manure piles

are an ideal place for flies and bacteria to thrive and multiply. It is impossible to produce high grade milk under filthy surroundings. Cows that are kept under such conditions will wade through the manure and get their legs plastered with it during rainy weather. It pays to clean up the yards early in the season and destroy the breeding places of flies and vermin. Lime spread liberally in the yards and stable will keep down foul odors and make life less comfortable for flies and vermin. Sawdust is an excellent absorbent to use in the gutters while the cows are being kept on grass and other succulent foods.

The work of handling the milk so that it will keep until ready for shipment or delivery to the creamery, factory or condenser is greatly simplified if one has an abundance of ice at hand. The milk should be removed from the stable at once, the cans put in a tank of cold water, and the temperature reduced as quickly as possible by frequent stirring. This removes the animal heat without exposing the milk to the air which even under the most ideal conditions is sure to have more or less bacterial floating in it. Cold and cleanliness are the agents that must be employed in making high grade milk during the summer.

After providing an abundant supply of bulky, succulent feed and clean and sanitary surroundings the next problem is handling the herd so that the losses from flies during the hot season will be minimized. Anything we may do to alleviate the suffering of the stock during this period will be amply repaid us in the increased flow of milk and gains in flesh condition. One pint of blood from each cow daily is the heavy toll demanded by flies during their period of greatest activity. Such losses and suffering mean that they cannot produce profitably at the pail. In nearly all dairy localities flies cut down milk receipts from thirty to forty per cent. No dairy farmer can afford to stand such losses. Keeping the cows in darkened stables during the heat of the day and spraying them with fly repellents greatly reduces their suffering. A spraying material made up of fish oil one hundred parts, oil of tar fifty parts and crude carbolic acid one part, applied every other day will give excellent results. A number of the commercial dips and sprays will produce equally good results. It is imperative that we use some form of fly repellent if we get best results from the cows during fly time. Young calves should be kept in a darkened stable during the day and turned out in the pasture at night for exercise during fly time.

Grade the Pullets.

There is a loss in farm poultry flocks from keeping all of the pullets that grow instead of culling them rigidly and keeping only the most vigorous of the best breeding. It will pay to divide the pullets into three grades. The first grade will be the birds which have feathered early and grown rapidly and were hatched from the best breeding stock on the farm. Such pullets should be suitable to keep until they are two years old with occasional culling to remove any birds that fall below expectations.

The second grade of pullets can contain the birds which may be satisfactory to keep for eggs during their pullet year. They can be forced for eggs and then sold for meat at the end of the laying period. If any of them develop unusual qualities of value they can be advanced to the first grade and held over another year for breeding stock.

The third grade pullets should be marketed the same as broilers. They will contain the birds that feather slowly and seem to lack the vigor that is necessary for good laying or breeding stock. They are the type of birds too frequently saved over in the farm flock and they seldom produce enough eggs to pay their cost of production.



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In addition, they lower the vigor and general laying average for the flock and reduce profits and chances for flock improvement.

The pullets of the third grade should not be sold to beginners for breeding stock or layers as this is very unfair. The amateur breeder will try to be successful with them and fail, and a good friend to the poultry business and a successful breeder may be lost because of the first failure with poor stock. Too often breeders with good stock sell their cull pullets to amateur breeders and it always injures their future business and is thus unprofitable to them as to the buyer.

The pullets of the second grade may not be good enough for the owner's flocks and yet be very satisfactory to a buyer who may wish a small flock of layers. It is fair to sell such stock as the buyer can often be very successful with them. In that way a new poultryman is made and such a man is apt to purchase higher class birds after enjoying some success with birds not quite so good.

It pays to keep the best grade of pullets where they can receive first-class care. This develops them into fall layers and if they lay all winter without too much forcing, the eggs laid in the spring can be used for hatching. Of course, these eggs will not be as good as the eggs laid by mature hens which have not laid often during the winter. However, they will produce very good chicks. This means that the pullets must be isolated from the cockerels and the old hens so that they can be given rations which promote a rapid, even growth and will not be disturbed at feeding time by other stock.

All the pullets should be given a separate range as soon as they have feathered out so they can be easily separated from the cockerels. This gives the poultryman a better chance to study the pullets on the range and the constant observation enables him to grade them fairly accurately. Strangers watching a poultry flock will wonder how the birds can be told apart if they are the same age and of the same breed. The poultryman of experience soon learns that the young poultry have an individuality of their own and he soon learns to watch the progress of certain birds as the same as he would study certain calves or colts.

Where I Rest.

There is a place where I am wont to stray

When every hope seems vanquished

Relentless Fury, and the chosen way

Grows shadow-cast and dim.

The placid stream allays my shapeless

feats:

With quiet faith it flows serenely

Until ashamed of my rebellious tears,

I find them gone, at last.

My pettiness is lost amid the sight

Of that vast out-of-doors before my

eyes.

The stretch of sturdy hills, the fields

of light,

The sweep of glowing skies.

There comes a clearer vision to me

there.

A quiet courage for the daily test,

And in the wonders of God's open air

I am again at rest.

Selecting Memorials

Man has always been a maker of memorials. His desire to be so is a manifestation of his innate craving for immortality. From the very earliest times he has aspired to keep alive at least the memories of great men, or of great deeds, or of astounding events. The Greatest of Teachers did not neglect this elemental phase of human character and one of the most beautiful services of the Christian church was founded as a memorial. With this end in view, too, men have created, often with tremendous expenditure of labor, many different kinds of commemorative monuments. In most instances these structures have long been of great historical value. The pyramids and obelisks of Egypt, the sculptures and other forms of architecture of the Greeks and Romans and the altars erected by the ancient Israelites each and all proclaimed in unmistakable terms the character and spirit of the men who erected them, quite as much as they kept alive the memories of the objects they were designed to commemorate.

During the past six months, very much has been said and written about memorials that will most fittingly call to the mind of future generations the splendid deeds of sacrifice performed throughout the war. To do this in the fullest and noblest sense, the memorials should possess characteristics that will symbolize the spirit that animated the men who fought and died. It is left for those who sacrificed in a lesser degree, or sacrificed not at all, to determine how these characteristics are to be exemplified.

The greater number of the memorials so far suggested are designed with a view to their being of service to the communities in which they will

be erected. The time when it was the custom to place bronze effigies of soldiers on granite pillars as an excuse for forgetting deeds of valor is happily past. At the same time, the building of hospitals, schools, halls, libraries, churches and other community institutions for memorial purposes should be more than expression of a materialistic age. Such institutions may be of deep and lasting service, or they may be merely utilitarian. Such structures can be memorials in any real sense only if those who erect them have felt deep within them the spirit of service and have given adequate thought to the visible embodiment of that spirit. Further, there is a danger that these, of themselves, will in time lose their glamor. To prevent this, it will be desirable to hold patriotic festivals in them on the anniversaries of the great battles of the war in which special attention should be paid to the spirit of service as well as to the memory of men and women who transcribed their conception of service in terms of supreme sacrifice. It is essential that memorials, whatever their form, should convey something of the beauty and courage and love of country that inspired the heroic deeds. It is important that they should be well and truly built, so that centuries hence they will recall these deeds to men and women and create in them a desire to cherish the memories of those who shared in a titanic struggle for human freedom. In any case, it should be realized that future generations will be in a position to judge with unfailing accuracy whether the motives that prompted the building of the memorials were worthy ones or merely sham.

A. D., in Canadian Municipal Journal.

Health Talks

By John B. Huber, AMMD

Dr. Huber will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not, it will be answered personally if stamped, addressed envelope is enclosed. Dr. Huber will not prescribe for individual cases or make diagnosis. Address Dr. John B. Huber, M.D., care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

How To Prevent Hydrophobia.

The only way to prevent hydrophobia is by administrative measures strictly enforced.

England not only has a muzzling order; but what's more, she strictly enforces it. Those who idolize dogs at the expense of human life get no sympathy. The result? Whilst hydrophobia used to be very rare on the Tight Little Island, the dreadful disease is now practically unknown there.

When stray dogs are captured methodically and without let up hydrophobia diminishes progressively to the vanishing point. When the pursuit of the civic mongrel is relaxed rabies again puts up its horrid front and the number of its victims increases. All dogs that are worth the price of a muzzle or a leash should be muzzled or leashed; the others should be destroyed. After all, the right fate for the unclaimed, starved, miserable dog is the blessed nemesis afforded by the town pound; or, far best of all, the pathological laboratory, where those wicked virologists work under the shameful pretense of assuaging human suffering and of benefiting humankind. Let us not be molly-coddles here.

And remember that besides rabid dogs there may be other rabid animals. Wolf bites are most dangerous by reason of the vicious character of the wound and the virulence of the poison. Cat bites come next; and then dog bites and so on in order, rats, foxes, jackals, bears, horses, cattle, sheep, pigs. But the wolf's, and next the

dog's bites, are generally responsible for the disease in the animal world. Bites on exposed surfaces are more dangerous than through the clothing; saliva is wiped from the teeth on the latter and little or none enters the wound. For the same reason long-haired dogs and sheep escape infection. Face bites are the more dangerous. Happily the majority of those bitten by a rabid animal do not develop rabies—some in seven is about the proportion.

Question and Answers.

My daughter is a school girl aged 16. She has inflammation of the inner lining of the white of the eye. Can it be cured and will her eyes be as strong as ever again?

Answer—This lid inflammation is called conjunctivitis. It requires local applications which should be made only by the family doctor. For an eye wash a teaspoonful of boric acid in a pint of water, that has been boiled, is right. Practically all eye troubles, that produce matter, are contagious. For the sake of others, therefore, as well as for your own family's sake, have this inflammation attended to at once. It can be cured, and if the trouble is attended to promptly, the eyes, in most cases, will be as strong as ever.

What is dry pleurisy? I have been told I have that. Also, one side of my chest is bigger than the other. Does this mean tuberculosis?

Answer—I am sorry to say that in many cases, pleurisy is the forerunner of tuberculosis. Further information is being mailed you.

Hogs

One of the best investments the breeder or farmer can make is a safe and comfortable house and yard for the breeding hogs. It should be away from the rest of the hogs, but connected with the other yards with a lane or driveway. A comfortable colony house and a strong iron fence enclosing a small yard, and a larger yard making altogether an acre of land will be sufficient to give him the necessary exercise and afford good grazing when the ground is not covered with snow. If the soil is good and the lot properly drained by a porous subsoil or tile it will produce a variety of grasses and clovers, such a combination as will suit the needs of the hog. Alfalfa is not well suited for the small yard so one must provide grasses that are. Bluegrass, orchard grass, timothy and red-top mixed will survive and last for years unless abused or rooted out. To start such a combination of grasses in the boar pasture prepare the ground in the spring, sow oats and peas mixed and seed with timothy, clover, orchard grass and red-top mixed equal parts and add one-third, the amount of bluegrass. The lot will be ready for grazing in six weeks. Such a seeding will come on and furnish grazing for a long time.

Alfalfa is such a valuable crop for grazing that it will pay one to have a field adjoining the boar's yard, so that he may have access to it when it is ready for grazing. If the growth is too luxuriant for him to graze profitably alone turn one or two bred sows in with him to get the full benefit of the crop. By changing him in the conditions of growth in the two lots demand and allowing one or two sows to run with him when there is an abundance of grazing he will always have better grazing than when only a small lot is used. Of course, if he is to have good grazing he must have rings in his nose to prevent rooting.

Such a house, yard and pasture for the boar will save a lot of unpleasant and risky work in caring for the hogs, more especially when an aged boar is kept on the farm. Besides there is a more disgusting feature of hog raising than to have breeding boars' breeding through fences and running about the premises rooting up the gardens and shrubbery and tearing up things in general. The man who takes pride in his work and keeps a breeding record of his sows will not allow his boars free run of the premises.

A rank growth of weeds becomes an asset when it is plowed under before they make seed.

One farm flock of 75 hens is reported as laying 120 dozen eggs in July and August which sold for \$30, the hens gleaming their entire living during that time from grain picked up from harvested fields of wheat, oats, and rye.

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The Dairy

The farmer of moderate means can use an ordinary herd of cows as a part of the foundation of a splendid grade herd if he selects a good sire of either one of the great dairy breeds. He can secure one or two heifers of the breed of his choice for a moderate outlay of money and gradually as time goes on he can sell his grade cows to his less fortunate neighbors and fill their places with pure-bred animals grown on his own farm. By and by he will find himself with a pure-bred herd and it will have cost him no large amount of money at any particular time. Such a course and such results are within the reach of most farmers throughout the country.

The cow must be in proper condition to go through the work of making a good production record, whether for seven days, thirty days, ninety days or one year. Few breeders of dairy cattle realize what condition means in making a great production record. It is often the extra few pounds of flesh and reserve energy that means the breaking of a world's record for milk and butter-fat production and places some breeder on the highest pinnacle of fame. It is difficult to define exactly just how to put on this extra flesh and bring the cow safely through her calving period, but it is seen only when cows begin their official tests as vigorous and well-fleshed as skillful feeding can make them. Condition, as meaning capable of maximum production, is necessary before a phenomenal record may be looked forward to in the coming test.

A good motto for the gardener and truck grower to keep in mind these days is "Get the weeds conquered before they conquer you."

Sell only clean eggs of good size at top prices. Use small, odd shaped and soiled eggs at home. As a rule it is not advisable to hold eggs for a rise in price.

When hens are being compelled to forage for the greater part of their living, drop into their roosting quarters frequently in the evening and feel of their crops. It is the full crop, like the full dinner pail, that gives results. If the crops are not well filled, supplement their gleanings with a good feed of grain at night. There's money in it.

THE CHEERFUL CHERUB

Stars shine all night

while everyone's asleep,

And flowers give sweet

scents all summer long,

And so though no one ever

looks at me

Through life I'll always

sing my little

song.

By R. H.

Illustration of a cherub.

"Stop! Look! Listen!"

"What in the world is that?" inquired Beatrice, stopping in the doorway of the library and pointing a dainty forefinger at a little signboard that, in somewhat shaky letters, requested the passerby to "Stop, Look and Listen."

"That?" said her mother, looking up placidly from the bit of sewing in her hands. "Oh, that is a little memento of Bobby and Peggy and their games this morning. They were playing railroad, and one of the crossings happened to be by that festive chair."

"Well, really, they ought to be taught to put away their things when they finish playing. What if anyone came in? Well, I suppose I'll have to put it away myself."

Beatrice moved pettishly across the floor, but Mrs. Marston held up a prohibitive hand. "No, my dear," she said, "that won't be necessary. I don't mind having it left here for a little while."

Beatrice stared. "Leave it, mother? Why, what for?"

"Oh, just to have one or two persons look at it." Mrs. Marston had resumed her placid sewing. "Perhaps you can guess who, Beatrice."

Beatrice's lips puckered a little round "O" of understanding. "Why, yes, Tom, of course. Indeed, I wish he would stop, look and listen before he plunges in here. Why, just yesterday, when I was serving tea to Fessie Walsley, in rushed Tom like a great colt, dog, throwing muddy snow and books and hockey sticks right and left; and he mortified me nearly to death!"

"You don't think of anybody else?"

"Well, I don't know. Of course, Bob and Peggy. If they would live up to that a little more, they would be always tumbling round and getting hurt the way they do."

Mrs. Marston finished her seam and began to fold a hem. "Anyone else?" she inquired with the same calm manner.

This time Beatrice giggled. "Well, really, since you press me, mother," she said. "If we could have it in the dining room where father could see it before he starts on one of his interminable stories when we have guests—"

She stopped abruptly at the look in her mother's eyes. "Well, really, mother," she said in a half-way apologetic tone, "you asked me if there was anyone else—and father was all I could think of."

"It didn't occur to you, did it, dear, to 'stop' for a minute and 'look' at yourself? Well, then, I must do it for you. The fault that this little sign called at once to my mind is one of yours, Beatrice. You pride yourself upon your manners, my dear, and you have reason—they are very pretty in most ways. But I wonder if you realize how very difficult it is for an older member of your family to hold your attention. 'Oh, yes, mother!' you say quickly when I ask you to do an errand; and away you fly before I want or need—and many times you do not."

"Oh, yes, father, I'm listening," you say, without even looking up from your book—and then you give a queer wandering answer that shows you haven't listened at all."

"And when your grandmother calls you to her door you never have time to go in and sit down in the leisurely way that old people love. It's always: 'Oh, good morning, grandma! I hope you feel better. Did you want anything special? Mary is waiting downstairs.'"

"You are gone before poor grandma has even had time to catch her breath. One of the first laws of courtesy, my dear, is to behave as if your time were, for the moment at least, at the full disposal of the person who asks for it—particularly if she is older than you. That was the message I hoped the little sign might bring you: 'STOP—quietly and absolutely until you know what is wanted of you.'"

"LOOK—straight at the person who is talking to you and give your full attention."

"LISTEN—quietly and courteously until you know just what he wants, and then answer intelligently."

Beatrice ran across the room and dropped pennantly by her mother's chair. "But most of all," she said, "Stop, Beatrice, and Look at your own faults before you make anybody else Listen to your criticisms of other people."

Pets That Are Profitable.

Briefly outlining the rabbit industry, I will compare it with poultry, barring the fact that a rabbit does not lay eggs—except at Easter time. Yet we have the Leghorn of the rabbit family in the Belgian and New Zealand varieties. We also have the Brahmas, Orpingtons, and counterparts of other large poultry types in the Flemish rabbits and Cheekered Giants. While I have heard many poultrymen compare the output of various varieties as to eggs, I also hear the rabbit breeders compare the output in meat of the Belgians, Giants, etc.

It is an undisputed fact that the Belgian and New Zealand types produce more meat in the course of the year than do the Giants; and, like our poultry friends, we also like to raise heavy producers and push the great big Flemish and Cheekered Giants to a weight of anywhere from 11 to 18 pounds, and sometimes over, when matured.—H. R. H.

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