

Farm Crop Queries

Conducted by Professor Henry G. Bell

The object of this department is to place at the service of our farm readers the advice of an acknowledged authority on all subjects pertaining to soils and crops.

Address all questions to Professor Henry G. Bell, in care of The Wilson Publishing Company, Limited, Toronto, and answers will appear in this column in the order in which they are received. As space is limited it is advisable where immediate reply is necessary that a stamped and addressed envelope be enclosed with the question, when the answer will be mailed direct.



Henry G. Bell

L.F.—1. Is wheat, oats and barley a good mixture to sow for pasture? 2. I have ten acres of fall rye on a light piece of land. Would like to seed it to clover. What is the best time to sow clover? 3. What is meant by sub-soiling? 4. What is the best soil for alsike?

Answer:—1. Ontario Agricultural College is reporting good results from a mixture of wheat, oats and barley, about a bushel of each per acre, for summer pasture. 2. It is of course too late to sow clover in your rye this fall. However, very satisfactory results have been obtained by scattering the clover seed over the rye field before the frost leaves the soil in spring. As the frost goes out, the opening of the cracks provides for the burying of the clover seed and a satisfactory catch frequently results. You can make more sure of a satisfactory catch if you top-dress the rye with 150 to 250 pounds of fertilizer carrying about 2 per cent. nitrogen and 6 to 8 per cent. phosphoric acid. This should be applied after the frost is gone out and when the ground is dry enough for the horses to walk across the rye field with a minimum of injury to the crop. 3. Sub-soiling is the stirring of the soil below the depth at which the average plow stirs it. This is accomplished by an attachment for the ordinary plow which stirs the furrow underneath that turned over, but does not bring the under soil to the surface. 4. As a rule a medium clay loam is best for alsike. It should be a fairly rich soil since the roots of alsike are comparatively shallow and make maximum use of the plant food near the surface.

Reader:—Kindly describe the hot water treatment of barley for smut. Is oats a good crop for a young orchard?

Answer:—The hot water treatment for killing the smut of barley is as follows: Place the grain in a bag and immerse the bag in water which has been heated to about 115 to 120 degrees Fahrenheit. After the grain has been in this water for a few minutes, transfer it to another barrel where water is from 130 to 135 degrees Fahrenheit. Allow it to soak in this water for about ten or fifteen minutes, after which pull the bag out

and dry it. Avoid the heat that on the roof at night has an empty crop. Avoid a cockerel that is not up to weight. Avoid any cockerel that is constantly being driven by other cockerels, or a cockerel that won't fight. Any bird that will fight has good vigor, vitality and strength, and these are essential. Avoid any male bird that crows little or seldom, because the very act of crowing shows the masculinity of the bird, and to be a good breeder he should be a strongly sexed. Do not use a male bird that is not a good, upstanding, deep, wide-chested, broad-backed and proud bird, because if he does not possess these characteristics he will never do to head any mating pen. An authority says that his secret of making new blood is to pick out a pen of females as nearly unrelated as possible, and put them in a pen and mate to that pen two cockerels; these cockerels should be entirely unrelated to each other. Use one cockerel on the pen of hens for five days; then take him out and put in the other one for the same length of time; and in that way blood is manufactured that is marvellous for mating to almost any hens, and marvellous, too, for laying.

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RAW FURS Join with neighbors and order fertilizers, lime, spraying materials and any implements that may be needed next spring. If carload lots can be ordered the delivery will be made more quickly than on small lots. Goods ordered now may not be delivered before they are wanted for use in the spring, and if delivered sooner the feeling of security resulting from having these things on hand is worth the slight interest lost on the money drawn from the bank to pay for them before they are needed. The railroads are blocked with freight, and though conditions in this respect may grow better it is best to take no chances. Order goods way in advance of the time they are wanted, otherwise it may be necessary to go without them when they are needed. This advice applies to seeds quite as much as to fertilizers and tools.

The cause of milk fever is frequently attributed to milking the cow out clean soon after calving. It is advisable not to empty the udder the first day or two.

Profitable Winter Work on the Farm

By T. J. Mathews.

Heretofore it has been customary for us to talk about the planning of the summer work on the farm, but we have not spent any particular thought upon the winter's work with the possible exception that we have indicated a few things that might well be done in the winter so that the time might more efficiently be spent in the summer.

In the face of the present labor situation the one word that has come to the front more than ever before is "efficiency," another word, "service," is now rapidly coming forward. It will be necessary now to do the work of the farm with one hand, where before it was done with two, and this can only be possible through exercising such supervision and systematic management that the moments of the working day will be spent to greater advantage. There is not a single man but who can go back over a day's work and find some way in which more could have been accomplished by the laborer. It may be little things, such as the fact that the man does not take the jug of water to the field with him; it may be that the plow has not been scoured and that forty or fifty minutes of the day spent in the field must be used in digging the rubbish and accumulated dirt off the plowshare; or it may be that a burr comes off and loosens a bit of machinery, to fix which will require the greater part of an hour's time, where two or three minutes spent in going over the machine each morning would keep it up to standard and would make it possible for the operator to spend all of his time operating rather than running around after old bolts and nuts.

Preparing the Seed There is no good reason why the oats that are to be used for seeding next spring should not be fanned out and treated for smut during the winter. Fanning the oats has been shown to be a good practice because it results in a quicker growth in the spring and early oats are usually free from rust. The treating can be done just as well during winter, the only precaution being that the oats should be put back into sacks that have been soaked in the treating solution. Even seed potatoes may be cut during the winter. It has been proven to be a worth while practice to allow cut seed potatoes to sear over before they are planted and these potatoes may be cut with no appreciable loss during the winter. This will save some hours of time when it comes to the planting season.

Some Field Work Possible While we have thought it, heretofore, well high impossible to do any field work in the winter, the conditions of this winter will force us to think otherwise. On most farms the job of hauling manure has been left until the rush of spring—this year this job must be done through the winter in order that the busy days of spring may be occupied with such essentials as plowing and caring for crops that are to be harvested. Further than that, it is good business management of resources to put the manure on in the winter time since larger loads can usually be hauled with the only inconvenience of it being a little harder to get into the field, but one season with another, it seems to me to be about as easy to get onto a field in the winter through the snow as to get on to it in the spring or summer time through the mud or soft plowed ground. Occasional fields here and there cannot be covered with manure this winter because of their rolling nature, but all level fields should by all means have the application during the winter, since there will be no appreciable leaching away and the job will be done when the rush of spring work comes.

Head Work Head work is essential also during the winter. Crop rotation systems should be planned out and the work so distributed that help may be hired during the entire year. The fields should be gone over carefully with reference to their past history and a definite outline should be made out to be followed during the next five or ten years. The first of the year should see an inventory taken of the farm business so that the total assets of the farm may be compared with its assets one year hence. The numbers of bushels of the different kind of seeds necessary to do the year's planting can easily be arrived at and these should be at hand when the planting season draws on. This will make for better use of the labor of both the farmer or his hands.

Fences and Orchards A great many farmers are deciding this year to use limestone to correct soil acidity and thus make it possible to grow more clover in order to add more organic matter to their farms. If the freezes and thaws are kept well in mind this limestone may be hauled from the station in the winter and spread upon the field exactly where it is wanted. In this connection, however, it should be said that the best results have invariably been secured by spreading ground limestone upon fields that have been already plowed and for this reason the limestone can

be spread through the winter upon those fields only that have been plowed last fall. Even fences may be made through the winter. In some cases it may be necessary to have the post holes dug and the posts set in the autumn before making the fence in the winter, while in other cases it will be perfectly possible to dig the holes during the winter season. The wire can easily be stretched and staples put in some of the good days.

The Dairy The lumps or swellings which may be found under the skin on the backs of many cattle from January until April contain grubs. If these grubs are allowed to remain, they will complete their growth, drop to the ground and transform into flies which will reinfect the cattle during the spring and summer. The grubs weaken the cattle, cause them to fall off in flesh and milk, and decrease the value of the hide. Grubs may be pressed out through the opening at the top of the swelling. A sharp knife and a pair of tweezers will often make the work of removing the grubs easier. Care should be taken to crush all the grubs removed, preventing their further development and transformation into flies.

Electrical apparatus operated by a keyboard like that of a piano has been invented for ringing church bells either as chimes or continuously.

Your Problems

Mothers and daughters of all ages are cordially invited to write to this department. Initials only will be published with each question and its answer in letter form on one side of paper only. Address and address must be given in each stamped and addressed envelope is enclosed. Address all correspondence for this department to Mrs. Helen Law, 233 Wocobine Ave., Toronto.

R.S.B.—Ask your dealer to get the kind of fish you want and give him no peace until he has brought them on the market. There are hundreds of women like yourself who are willing to try the new varieties of fish but are finding it hard to secure them. Fish and bacon trade being extensively struck off the menu. The fishermen are ready to supply you with all the fish you want. You are ready to use them. Then approach the middleman and induce him to bring unfamiliar varieties on the market in increasing quantities. If you want to know all about them and the best way to cook them write to the Office of the Food Controller at Ottawa for a useful little book entitled "Eat more fish: How to prepare, cook and serve Canadian fish, and so conserve Canadian beef and bacon for the soldiers at the front."

L.R.F.—We are glad to be able to inform you that the reports received at the Food Controller's office regarding the saving in restaurants through beefless and baconless Tuesdays and Fridays are most encouraging. Reports from only 33 large hotels and restaurants throughout the Dominion, out of the 16,500 public eating places, show a saving for October, 1917, of 263,000 pounds or 131½ tons. The saving in bacon for the same 33 establishments was no less than 40½ tons.

A.A.R.—Better late than never! You are by no means the only country woman who has repented her decision not to sign the food pledge card. A number of tardy people have come to see that perhaps there was some reason underlying the pledge card campaign after all. You can get these cards by writing to Mrs. Garnett,

Secretary of the Women's Auxiliary to the Organization of Resources Committee, Parliament Buildings, Toronto, or the provincial secretaries of the Food Control offices at Winnipeg, Regina, Edmonton, Vancouver, Montreal, Fredericton, Halifax and Charlottetown, P.E.I.

Bedtime Stories A Christmas Party in Toyland. It was at twelve o'clock one night shortly before Christmas when the toys in the big toy shop agreed to have a Christmas party. The miniature Santa Claus who stood on the counter, thought of the plan, and he said: "Let us have a Christmas party here in the children's big playroom and have one last romp together before we are sold."

Then Santa Claus called the toy policeman and asked him to help manage the party. The policeman went out on the floor and suddenly stopped the motorcycle man, who was starting out for his midnight spin. "Will you please carry a message for Santa Claus?" he said. "He wants all the toys in this Toyland to come to the children's room for a Christmas party. So go as fast as you can to the departments and invite all the toys." And the toy motorcycle man broke all the speed laws in Toyland, and nearly broke his clockwork machinery as he rushed on his way.

Soon the toys were in the large playroom. First, the dolls and Teddy bears coasted down the toboggan slide. Then they all rode on the merry-go-round until they were dizzy and tired, and later they visited the toy farms. Here they saw woolly lambs that said "Baa-baa-baa!" whenever they turned their heads to one side, and horses that fairly pranced along on their rollers.

Next they saw a marvellous military parade and all the dolls clapped their hands and cheered and stood up to watch the soldiers as they marched. After that they went to the sand box where the toy battleships were drawn up for a naval exhibit.

Next Santa Claus took them to a Punch and Judy show, and they all laughed and shouted. Then the dolls went to a big supper party. But the queerest part was that, although the dolls seemed to have quite enough, still the food on the plates and platters was always the same. Then Santa Claus said the toy musicians to play, and they took hold of hands, and Santa Claus danced with them around a tall Christmas tree until the policeman said: "See, the day is dawning; I am the one appointed to uphold the laws of Toyland. Each one must go to his place at once and be ready for his day's sale."

"Yes, it is time to say good-bye," said Santa Claus; "but remember wherever you go it is your duty to make the children glad, for that is why we toys are made. You dolls must consent to be hugged and loved by the little girls; you soldiers must march and drill for the little boys, and each toy has its place in the home to fill; and you will be happy in your new life by bringing happiness to the children."

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Rose of Sharon:—A novel idea for a wedding present? Well, what do you think of this one? The Women's Institute at South Tilley, N.B., has hit upon the scheme of giving all brides a wedding gift a year's membership in the organization. The Upper Sackville Women's Institute, N.B., goes one better and makes all school teachers, as well as brides, members for one year. The habit once formed they are likely to remain members and the very finest organization to which the country woman can belong is one of the Women's Institute's ubiquitous branches. Speaking recently at the Sixteenth Annual convention of the Women's Institutes of Ontario held at Toronto, Mr. Hanna said that the women of the Institutes could do a great deal to encourage the increase of food production, which is of the utmost importance at the present time. He urged the women to forget minor differences and to co-operate for food conservation.

Mrs. L.R.F.:—There is nothing like asking for specific information on questions over which you are in doubt. If one lump of sugar instead of three, or one teaspoonful instead of three were used by the people of Canada the saving would greatly help out the demands of Italy, Great Britain and France. Italy's per capita consumption before the war was 12 pounds; that of France was 18 and of Great Britain, 28. In North America each man, woman and child consumed 80 pounds of sugar a year.

Therefore, I repeat, limit a boy or girl to one or two books a week and after the household was sound asleep, lit the lamp and read until 3 and 4 o'clock in the morning! Therefore, I repeat, limit a boy or girl to one or two books a week and after the household was sound asleep, lit the lamp and read until 3 and 4 o'clock in the morning!

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TRAINING YOUNG BOOKWORMS

By Irene Stillman

"That's the sixth book Willie has read this week," said a mother to me in great exasperation. "I don't know what I'm going to do with him. He has some studies which he should brush up before the new term, and there are so many little things, errands and the like, that he could do if he would to save my steps. Public libraries are nuisances," she ended vehemently.

Of course the mother was wrong. With a little trouble she could have firmly limited the boy to two books a week, at the most, during vacation; one a week is sufficient for a child during the school term. Constant reading causes a physical sluggishness and saps both physical and mental energy. "After I have read too long I feel dragged," said a woman to me, and any one who has indulged similarly knows the sensation.

A youngster's interest in a book may be so strong that he or she will smuggle the book into all sorts of unexpected places because of the inability to wait to see which mirage comes off victorious in the life and death fight or whether the brave young settler reaches his little colony in time to prepare it for the coming of the warring Indians and to bravely defend the lady of his heart. Needless to say, these youthful gobbler of "literature" require careful and sympathetic watching. This I know from very personal experience. From eight to eleven years of age it was almost impossible to rouse me in the mornings in time for school. This my adult world was much puzzled to understand, as I was sent to bed fairly early. And no one knew until I, too, became an adult and told the tale upon my little self that I smuggled a book to bed with me and frequently, after the household was sound asleep, lit the lamp and read until 3 and 4 o'clock in the morning!

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