

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

H. S.:—1. What is the best variety of spring wheat? Would sod plowed up last fall be good for wheat? 2. How deep should the land be plowed for peas? Should they be sown early or late in the spring? 3. Do you recommend white blossomed sweet clover for pasture? Does it make good pasture for all summer?

Answer:—1. Marquis spring wheat seems to be a good variety at the present time. It has been tried in comparison with other wheats at Guelph, and as an average of three years' test it gave a yield of 41.2 bushels to the acre. It is early wheat and is giving particularly good results in the West. Fall plowed sod, thoroughly disked and harrowed, should make a good seed-bed for wheat. In order to insure a good stand of wheat, and especially a good catch of clover and timothy, I would advise you to fertilize your wheat with about 200 to 300 pounds of fertilizer carrying 8 per cent. ammonia, and 8 to 10 per cent. available phosphoric acid. 2. In preparing the seed-bed for peas, if you are spring plowing, do not go below five inches, if the land is of medium loam type. As to time of seeding, O.A.C. tests show that best results are obtained when peas are planted about a week after the season opens; that is, sow wheat, barley and oats about a week before peas. Late sowings do not give as good results as peas sown at the time indicated. 3. Some stock men claim that their cattle thrive on sweet clover. Others claim that the cattle do not take to sweet clover pasture on account of the aromatic oil that the clover plant contains. The sweet clover plant lasts for two years. It makes a rank early growth and if the stock will eat it, an abundant growth should supply them with a considerable quantity of nutritious feed.

R. B.:—I have always farmed on clay loam. After selling my farm I moved to the city and my lot is sand. Last year the blight struck my potatoes and they did not do very well. I use manure. Would fertilizer be of use to make a quick growth and is there a special kind for sandy soil? Would it be proper to drop it in the hill or sow-it broadcast? What is the proper time to spray currant bushes?

Answer:—On your sandy garden soil you would do well to work in a considerable amount of leaves and straw material. You will get good results from using a moderate amount of fertilizer in addition to manure and this other organic material. For sandy soil the fertilizer should contain from 3 to 4 per cent. ammonia, 8 to 10 per cent. available phosphoric acid and as much potash as you can obtain under present conditions, which would be from 1 to 3 per cent. In applying the fertilizer to the potato patch, you would do well to scatter a light sprinkling of about 20 pounds on a 200-square-foot patch. When you have opened the holes or made the trenches, scatter about 20 pounds more fertilizer, distributing lightly along the trenches or in the holes. Scatter a light covering of soil over the fertilizer before dropping the potato pieces. Finish planting the potatoes in the normal way and results should be highly satisfactory.

The blight disease is very destructive to potatoes. Therefore, you should spray your potatoes five or six times during the growing season, starting when they are just coming out of the ground. The spray material to combat blight diseases is called Bordeaux Mixture. It is made by dissolving 5 pounds of lime in 5 gallons of water, and 5 pounds of copper sulphate in another pail containing 5 gallons of water. Then pour the two together and add 40

gallons of water. This should be sprayed upon the potatoes immediately after being mixed. Of course it is not necessary to mix up all this quantity at once, but keep the stock solutions of lime and copper sulphate in separate wooden barrels or large pails and mix such quantities as you need to spray your patch thoroughly. The various sprayings should be done about 10 days or 2 weeks apart. Add a spoonful of Paris Green to the pail of spray solution once or twice during the season and you will control the insect pests also.

Current bushes should be sprayed when the leaves are fully out. At this time arsenical sprays, such as lead arsenate or diluted Paris Green should be sprayed on the foliage so as to control the leaf-eating larvae. After 10 or 14 days another application of Hellebore spray should be made. Repeat these sprays if necessary.

H. H.:—1. What is the best mixture for an annual pasture? 2. How do you kill smut in oats? 3. Do you recommend sudan grass for hay and pasture?

Answer:—1. An annual pasture mixture giving good results at the present time is composed of one bushel of oats, one bushel of barley and one-half bushel of rye. You must avoid letting any of this grain come into head. Otherwise the straw will become hard and woody and the spreading leaves of the plant will dry up, reducing the value of the pasture. 2. Smut in oats can be readily controlled by dipping the seed oats in a mixture of one pint of formalin to 21 gallons of water. Prepare this mixture in a barrel. Put the oats in a fairly coarsely woven bag and lower them into this mixture. Allow them to stay there 15 to 20 minutes and then take out the bag and allow the liquid to drain off. Empty the oats onto a dry floor and keep them turned sufficiently often so that they will dry out rapidly. The mixture of formalin and water contains a very penetrating gas dissolved in water. This gas kills the small seed spores of the smut disease. 3. Sudan grass is giving considerable results under long season conditions in Southern states. It is relatively coarse in quality and is not especially adapted either in season or in quality for growth under Ontario conditions. It would do much better to stick to a good grass mixture of clover and timothy, possibly adding a little meadow fescue for hay, or if you have a field that you can leave in hay for three or four years, I would advise you to try alfalfa.



Half Past Eight.

Half past eight's the meanest time! When I'm seated in my chair, And I see my breakfast there, Then that little clock will chime! Up looks father o'er his plate: "Hurry, son, or you'll be late; It's half past eight."

After school, though, I do things— Fly my kite or play baseball— Till I hear our Hannah call. When the supper bell she rings, After tea they light the grate, And I read there while I wait. For half past eight.

Seems to me I haven't read Half a page, when I hear pa Put his paper down, and—"Ma, It's time for John to go to bed!" So I have to yield to fate, If there's any time I hate, It's half past eight!

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BEFORE HE GOES TO SCHOOL

At Home the Farm Child Has the Best of Opportunities to Master His First Reading Lesson.

By Caroline Sherwyn Bailey.

We find the child, when he is three or four years old, scribbling with a pencil wherever he can make a mark, and even tearing books and papers. This is not due to a destructive instinct but to an unexpressed desire to solve the riddle of script and printed words.

Later come more marked expressions of this longing to read. He fingers the raised letters on his blocks and mug or plate. He tries to spell the signs on the fences and the large headings in the newspapers and magazines. Children ought to have home teaching at this time. The art will come more easily than it will later and an early grasp of reading means the ability to gain before school age, information that will shorten the school course by a year or two.

He must have a wide command of language before he can decipher the printed word. The larger his vocabulary, the more Mother Goose rhymes and nursery stories he has heard, the more names of common things and their qualities he has been told, the more quickly he will learn to read.

The farm child has unlimited opportunity for receiving this first training in reading.

As early as possible he should know the names of the home furnishings, the farm animals, flowers, birds, vegetables, tools and whatever else he sees and contacts in his home life. He should be able to tell which articles are hard, soft, colored, shiny, dark, light, round, square, old and new.

Whatever questions he asks at this time should be carefully answered and he should be encouraged to speak in sentences, well enunciated, rather than in disconnected phrases. The child is like a stranger in a foreign land, trying to learn its language and he needs the most thoughtful help on the part of those in the home.

The farm child has a better opportunity than the city child for acquiring a large vocabulary to help him to read at an early age. The whole earth with its products, its various kinds of labor, its changes in color and temperature, its animals and its structural life, lies at his doorstep.

He is curious and eager to know about all these. Tell him everything that he desires to know about the farm and help him to retell it. This is the foundation of home reading.

The two next steps in teaching a child to read are simple memorizing and a familiarity with the form of letters.

The little child should have a good book of illustrated Mother Goose rhymes and some picture books in which the rhymes or a few lines of text are printed in large text on each page underneath the pictures they describe. Such books are very inexpensive.

Read these to the child until he is able to repeat them and find the pictures to which they belong. Then encourage him to point to each word on the page as he repeats the jingle.

The rhymes or sentences should be very simple and short, and the aim of this step is not at all to bring about a parrot-like effect of reading through memorizing but to help him to recognize the word unit on the printed pages as a preliminary to reading the words.

Incidentally, though, the bright child will learn unconsciously in this way, to read many words.

We thought for a while that children did not need to learn the alphabet. We have found out now that it is not only necessary but that

Your Problems

Conducted by Mrs. Helen Law

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 as a means of identification, but full name and address must be given in each letter. Write on one side of paper only. Answers will be mailed direct if stamped and addressed envelope is enclosed. Address all correspondents for this department to Mrs. Helen Law, 235 Woodbine Ave., Toronto.

A Wheat Saver:—You're a very up-to-date and prudent person, Miss Wheat Saver, and it's a pity there aren't a few more women who look at things in the same light. Your request for oatmeal recipes is very timely. We're getting right back to that good old stand-by these days, aren't we? Oatmeal and onion soup really tastes much better than the name would lead you to believe. Fry two large slices onions. Add a quart of water, half a cupful of chopped celery leaves, salt and pepper to taste, and one cupful of oatmeal. Bring to the boiling point, cover and allow to simmer for two hours. Strain, add two tablespoonfuls of tomato catsup and serve very hot. Oatmeal pudding is particularly rich in protein. It is made in much the same manner as plain rice pudding. Bring to a boil one quart of milk and add half a teaspoonful of salt and one-quarter of a cupful of oatmeal and one-quarter of a cupful of brown sugar. Stir until it reaches boiling point. Put into greased pudding dish and bake in a moderate oven for two hours. As it begins to crust flavor with vanilla extract. Remove from the fire and spread with a tart jelly. Both these recipes are rather out of the ordinary and serve as excellent dinner dishes.

Rural Teacher:—Judging from your letter there is nothing to prevent you from starting a school garden this year and you will be doing something very much worth while if you

follow out your present idea. The children will like it, especially if you impress upon them that they are doing it for the sake of the children of invaded countries. In connection with one Ontario school two and a half acres were cultivated last year. The total expenses amounted to \$74. The sale of potatoes netted \$252.40 and of the beans, \$144, so that after everything was paid the boys were \$322.40 to the good. The total amount of work done was 1,288 hours, so that each boy received 25 cents an hour for the time he put in on the work. Everyone who possibly can should grow something this year and the country school is in a ideal position to have a small garden.

Mrs. R. A. S.:—Surely you are a little mistaken when you say that it is "out of the question" for women to keep pigs and that it is unreasonable to ask them. Listen to one woman's record. Last summer she kept between two and three hundred pigs just beyond the city limits of Toronto. She has ten acres of waste ground and buys garbage from the city. In summer for feeding purposes. Last fall she sold seventy-nine hogs weighing about 9,600 pounds at an average price of \$18 each. During the year she made \$1,000 in this way. This patriotic woman has five boys at the front and one at home helping her. If one woman can do all this surely others could keep at least one pig.

words, name them and group them into sentences. Small pictures can be cut out and mounted and the nouns naming each can be picked out from the game of anagrams and laid underneath the pictures.

In a surprisingly short time, a child will be constructing sentences, reading them and spelling the words. The main trouble with our attempts at teaching a child to read at home in the past has been that we started with an entire, confusing page full of text. To begin with letters and words simplifies reading and accomplishes quick results.

Two copies of a good primer or simple first reader should be used, one cut up and the pictures and words mounted for constructing the stories as in the case of the nursery book. Soon the child will be able to read a printed page without the help of the duplicate words.

Six months of this home teaching should give him a grasp of print and phonics (the science of speech sounds) that will enable him to do

simple reading directly from a page of a primer.

Helps to home reading can be obtained from the school supply shops in the larger cities. There are large cardboard letters, small pictures with descriptive words in big print on cards to accompany them, sets of words in script and print, and large script copies for a child to trace in learning to write. The new primers and first readers are full of bright pictures and are as attractive as a picture book for a child.

A short period of teaching reading each day will send the child to school, when his school days come, many leagues ahead of the others. One reason for a child's difficulties in his first school reading is the fact that he must have group teaching. One of a class, he struggles along without individual instruction. Why not give him this personal help at home? He will never learn more easily or from a more beloved teacher than at home from the one who should understand him better than anyone else.



MARCH 17.

Lesson XI—Jesus Sending Forth the Twelve—Mark 6, 7-13, 30 Golden Text, Matt. 10, 8.

Verse 7. He called unto him the twelve, and began to send them forth by two and two—His work in Nazareth being defeated, he leaves the town and begins a teaching tour among the villages. The Twelve have an official position. He has been preparing them for missionary service and now sends them forth. Matthew gives the fuller account (Matt. 9, 35 to 10, 40). They go forth two by two because each can help the other. Thus they cover six districts. Authority over the unclean spirits—Matthew and Luke state that their mission also included healing and preaching.

8. Nothing . . . save a staff only. This was an emergency call, and they were to be content with the simplest outfit. Usually journeys in the East were most carefully prepared for. But these men were to subsist off the people. No bread—This they could obtain wherever they stopped. No wallet—or haversack, used to carry provisions. No money—Literally, brass or copper, for it would be unnecessary. In their purse—The girdle worn about the waist, in the loose folds of which money was placed.

9. Shod with sandals—The simplest protection for the feet. Shoes also were worn by Jews—costly shoes, such as were in use among the Babylonians, furnished with upper leather. Put not on two coats—Persons of distinction sometimes wore two tunics. They were to encumber themselves with nothing that would be unsuitable for plain men going about among ordinary folk. In the case of the poor the tunic was the only garment.

10. Abide till ye depart thence—instead of restlessly changing from house to house they were to be satisfied with the hospitality afforded.

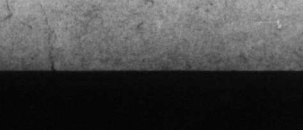
11. Literally, brass or copper, for it would be unnecessary. In their purse—The girdle worn about the waist, in the loose folds of which money was placed.

12. Went out, and preached that men should repent—The burden of their preaching is identical with that of John the Baptist and Jesus. Their chief mission was to reach the inner life to produce change of mind, change of purpose, change of attitude toward life, the forsaking of sin, and turning unto God.

13. They cast out many demons, and anointed with oil many that were sick. They closely follow all that Jesus did. But we have no record that Jesus anointed with oil. All his cures, with rare exceptions, were immediate. The only other place in the New Testament where oil is used in healing the sick is in James 5, 14. The use of oil was common as a medicinal specific. Its use was symbolic of supernatural healing.

In verse 14-29 there is given an account of the murder of John the Baptist by Herod. The report of the wonderful works of Jesus caused Herod to believe that John the Baptist, whom he had slain, had risen from the dead and had resumed his preaching. Mark gives the fullest account of what led to John's imprisonment and his execution.

20. Told him all things, whatsoever they had done, and whatsoever they had taught—The place to which the Twelve returned is not stated. It was probably Capernaum or its neighborhood. They gave a full report both of their teaching and their works. Nothing is said of their success or of the Master's estimate of their labors. It was no doubt a tour of profound importance to his work. They no doubt recounted their varied experiences and received from him the necessary counsel or approval which their report required. We may conjecture that their work was not without its mistakes and blunders, but not without the accompaniment of the power of God. Details of this first evangelizing tour by a group of Christian preachers would be of priceless value to us to-day.



True Patriotism

By Katherine Glover

The farmwife and I fell to talking of neighborhood things. I told her I had been staying at the hotel in the near-by town and she said with genuine concern, "Well, isn't that too bad when you might as well have come to our hotel? Travelling men who have been all over the country say it is the best in the whole of Canada."

From her window I could see the hotel, a mere shack. One could imagine there being a friendly host who would make one feel much more welcome than at a big, glittering hotel but one could hardly call it "the best in the whole of Canada." But there was something, so warm and genuine in the farm woman's recommendation, it made me feel sorry I had not put her famous hospitality to the test.

That glow of local pride shining in the eyes of my hostess, the faith in the thing that is a part of one's surroundings and the willingness to defend it, is one of the great world forces for good or evil. It can stir us to splendid, impersonal deeds for our own community or it can drag us to sleep in the face of crying needs for change through our very acceptance of the ways to which we are accustomed.

I have been in the countries now struggling in terrible war. Looking into the faces of the common soldiers in France, in England and in Germany, as they went back and forth to and from the trenches, and into the faces of those splendid women who are bearing so gloriously the heavy burdens of war, I saw the same look of the farmwife who glowed with pride over the perfection of her village hotel. Only it is for love of country instead of a tiny village community that these soldiers and these women are aroused.

Yesterday they were just folk like you and me doing their village tasks as best they could contributing to the upkeep of their communities because of the love they bore them. Then almost overnight their local pride became that tremendously larger force, patriotism, which, roused to action, can weld peoples together in world wars, can topple kings from their thrones and set up new republics and fresh ideals of democracy.

It is such a pulsing, changing, vital hour in which we live that there is not one of us whose efforts are not needed to mold and shape our communities to the new developments of the times.

We need to watch the achievements of other people and other communities than our own, to be wakened to our shortcomings and ready to stand shoulder-to-shoulder to put our neighborhood in rank with the most progressive.

If you will look carefully at any community that has forged ahead, usually you can put your finger on a few wide-awake, active men or women, sometimes it may be only one, who with their own ideas and energy have started the wave of improvement.

It is amazing how easily fired is that flame of local pride which smoulders within us all. It takes just a spark sometimes to set it going. The spark may be lighted by nothing greater than a "get-together" sort of among the women to bring some effort of wholesome amusement into the community to handle the problems of two or three poverty-stricken families.

We are in too complex a period of the world's development for any one to be able to sit entirely apart and settle only his or her own problem. We need constant sharing and comparison. We need to get out in the open and look around us with the eyes of someone else.

We should keep ourselves alive to the new ideas that pour in with every newspaper and journal and come to us by every wayfarer who stops at our door. We should keep our local pride out in the sunlight, an active, stimulating urge to development rather than shelter and pamper it until it grows narrow and resentful of any change.

Home.

Home is in a forest or far in foreign lands,

Home is where the pines are or the busy clanging street;

Home is where a friendly hand touches other hands,

Home is where there's laughter and where glad hearts beat.

Home is flanked by other homes or lone in wind and sun,

Home is stately beautiful or very small and dear.

Home's where some one's waiting with a smile when work is done,

Home is where there isn't room for loneliness or fear.

Maybe home's a palace, where wide halls are,

A palace fair and beautiful 'neath skies of shining blue;

Maybe just a little house set beneath a star—

Home is where there's laughter and a kiss for you.

"This life were brutish, did we not sometimes have intimation clear, of wider scope. Hints of occasion, infinite, to keep The soul alert with noble discontent, And onward yearnings of unstilled desire."