

# 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.

Question—M. A. C.—My seedling with grain last year was a failure. It did not catch. Would you recommend manuring and plowing the stubble for potatoes this year? Would it do for beans where potatoes grew last year? It was a big growth of clover, also manured, plowed under and potatoes planted. I want to reserve an old meadow to plow under for corn this year and will also have to plow last year's potato and corn ground for oats this year?

Answer—The land where your seedling failed, if plowed up and then carefully manured, should make good potato ground this year. I would advise in addition to the manure about 400 pounds of fertilizer carrying 2 per cent ammonia, 8 to 12% available phosphoric acid and 1 to 2% potash. Scatter this down the drill rows when you are planting the potatoes. A good method of application is to drop the seed pieces of potatoes and cover them lightly with soil, and then dust the fertilizer along over the hill and drills and finish the covering. This addition of available plant food will give the crop a strong, vigorous start. This land would do well for beans, also.

Question—R. L.—I have a piece of land that has been run for years without clover or manure. This land is quite sandy and contains practically no humus. Now, if I apply 12 good loads of manure to the acre, which would be the most profitable crop for me to raise, corn or potatoes? I raised corn on similar land last year that went 60 crates to the acre, with manure. Would this ground hold moisture sufficient to grow a good crop of potatoes?

Answer—If you have potato seed, by all means potatoes would be the most profitable crop for you to grow on the land in question. I would recommend adding fertilizer to the manure, as per answer to M. A. C. Under normal conditions you should not have any trouble from lack of moisture. If you have to buy potato seed, at present prices it may be more profitable to grow corn, but this you will have to decide from your own local conditions. If you seed to corn, I would advise adding about 200 pounds of fertilizer to the acre, spreading it broadcast and working it into the ground before you plant the corn. It should carry from 2 to 3% ammonia and 8 to 10% phosphoric acid.

Question—W. A. C.—I would like to get your opinion in regard to planting beans in hills, planted 28 inches each way. Do you think the yield would be as good as if they were drilled? They could be worked both ways and kept much cleaner and less seed would be lost. The seed is so high in price this year it would be quite a saving in the cost of the crop.

Answer—I am very much in favor of planting beans in the hill, especially on land that is likely to be weedy or where disease has been prevalent. As a rule, the yield will be almost as high as if they were drilled and frequently better as disease is not so likely to spread from one plant to another. I would suggest the seed be tested to learn what percentage will germinate, and since seed is so high-priced, that the drill be also tested to see if it plants the quantity of seed desired. I would also put on about 200 to 300 pounds of fertilizer to the acre. The fertilizer may be put on broadcast and worked into the ground before the beans are planted, or it may be put on as the beans are planted if care is

The Retort Courtious.

The following anecdote is carefully preserved by a family whose Scotch ancestors took a rise out of the great lexicographer:

Hostess—"Dr. Johnson, what do you think of our Scotch broth?"

Dr. Johnson—"Madam, in my opinion it's only fit for pigs."

Hostess—"Then have some more."

Fish Pond For The Farm.

Why shouldn't a farmer raise fish as well as chickens? Given proper fresh water supply and reasonable space for a pond, an astonishing quantity may be had in two or three years.

Doing the impossible is a commonplace of enterprise.

# Poultry

Market in June.

All roosters, old hens, early broilers, green ducks.

During the first week in June, kill off, dispose of or remove from the flock, the male birds after the breeding season. Their presence in the flock after this date causes a loss of a million dollars a year to Canadian farmers through the sale of partially incubated and bad eggs in the produce which is marketed. All old hens should also be marketed at this date.

The proper way to carry a fowl is to place it under the arm, the head pointing to the rear, and the feet held firmly by the hand. In this way the bird can be carried for miles without the least discomfort to it or the person carrying it.

In former years, the common practice was to carry poultry by the legs, head hanging downward. This was a bad mode and one that never was used by regular poultrymen. When the head is hanging downward there is nothing to prevent a rush of blood to it, and it is the belief that many cases of vertigo can be traced to such acts of carelessness.

But still more cruel is lifting the body by their wings. Should the fowl struggle when thus handled, it is a very easy matter to snap the cords of the wings and thus permanently injure the bird.

Poultry roughly handled lose confidence in their attendant, and loss of confidence in the henry often has a bad effect upon the egg crop. Besides, any method that crops the least bit toward cruelty should not be permitted. Gentleness is a virtue that even hens appreciate.

The mash for the chicks may consist of equal parts of bran, middlings and cornmeal, and half part of beef scrap, but the composition is more or less dependent on the feeds that are most available.

Pullets that are stunted by poor feeding during the first few weeks of their lives will prove a decided disappointment from the standpoint of their egg production.

The most effective method for body lice on hens is the application of a dilution of either mercurial ointment or blue ointment. Mercurial ointment contains fifty per cent of metallic mercury. Blue ointment is a mixture consisting of sixty-seven per cent of mercurial ointment and of thirty-three per cent of vaseline and, therefore, contains thirty-three and one-third per cent of mercury.

## Replanting Sand Dunes.

The famous Sandbanks in Prince Edward county may be converted into a big reforestation plot. The drifting sand has covered several hundred acres of farm lands adjoining, rendering the property useless. A deputa-tion waited upon Hon. G. H. Ferguson, Minister of Lands, Forests and Mines, Toronto, with the request that the Ontario government establish a reforestation scheme upon this barren waste. The Minister seemed favorably impressed with the suggestion and promised consideration.

## FOOD SHORTAGE SUGGESTIONS

The Food Value of Buckwheat is High, As It Is Both a Flesh Producer and a Heat and Energy Producer.

By Henry G. Bell, Agronomist.

Buckwheat panaceas may form a welcome substitute for breakfast wheat cereal and bread toast, while wheat ranges around the \$2.50 a bushel mark.

Buckwheat characteristics strongly recommend this crop for cereal production.

Buckwheat is a dry grain which can be stored. After wheat, corn and rye, buckwheat contains a maximum of food in a minimum of volume.

Buckwheat is strong in both flesh producer and in energy and heat producer. It compares with wheat as follows:

Crop	Water	Percent Protein (Fresh Pro-ducer)	Percent Carbo-hydrates (Heat Pro-ducer)	Fats	Fibre	Ash
Buckwheat	14.4	9.0	58.7	1.5	15.0	1.8
Wheat	14.4	13.0	66.4	1.5	3.0	1.7

Buckwheat yields from 10 to 40 bushels per acre. Buckwheat requires from 3 to 5 bushels of seed to the acre.

Buckwheat suits poor, light, dry land. It produces larger yields where additional fertility is supplied, 200 pounds per acre of fertilizer supplying one per cent ammonia, 8 to 10 per cent phosphoric acid, gives good results. This should be drilled in when the buckwheat is sown, or broadcasted and worked into the seedbed by disking and harrowing. You can increase the effectiveness of high-priced farm labor by fertilizing the buckwheat. A yield of 20 to 30 bushels per acre uses the labor much more profitably than a yield of 10 bushels per acre.

Finally, buckwheat should be sown later than corn and the small grains. It is therefore an excellent crop for "filling in" where other crops fail. Buckwheat is quoted in Chicago at \$3.20 per bushel.

Strong food is compact volume. Food suited to storage, therefore, valuable for export. Thrives on comparatively poor soil. Makes quick and reasonably large returns. May be planted later than other crops; hence can be used to fill in "where other crops fail." Buckwheat matures in less than 100 days.

# A Great Remedy

D. R. HENDERSON'S Herb Treatment in tablet form will cure rheumatism, constipation, eczema, stomach trouble, kidney and liver trouble, three month treatment with our certified guarantee, for one dollar. Send to: Henderson Herb Co., 173 Spadina Ave., Toronto, agents wanted.

## Tomato Culture.

Tomato seed sown in boxes in the house in March will produce plants that will fruit the same season. Plants ready to be set out can be purchased from seedsmen. In buying plants select strong, sturdy plants, avoiding the tall drawn specimens that are frequently offered. Where tall, spindly plants of tomatoes must be used pinch off the top. This will check the up-

right growth temporarily and give the plants an opportunity of becoming stronger. It also causes them to branch.

There are several systems for growing tomatoes. Some prefer the one stem system; one or two stems on each plant. A horizontal support is kept the fruit off the ground and lets the sunlight and air reach all sides of the plants.

Another system is to set the plants under trellises made by running narrow strips of wood along stakes about two and a half feet above the surface of the ground. Two strips are run about two feet apart, braced with cross sections very two feet to form a rigid frame or trellis. The tomato plants are set out under the middle of this framework and trained up through the centre, the frame supporting the plants when they are laden with fruit.

Another method is to make a trellis the shape of a funnel, setting this over each plant. A horizontal support is another form of the same plan.

When grown on a large scale field culture is the system practised. The plants are set out in long, straight rows, cultivated by horse, and the vines are given no support. This system may be used also in small gardens.

## Beans a Valuable Crop.

Beans have a two-fold value. They rank among the valuable foods, containing a higher percentage of protein than wheat or oats, and even meat. Beans are also of value from a soil cultural aspect, as they belong to a most important class of agricultural plants termed legumes, which are capable of taking up indirectly the free nitrogen of the air and storing it in tubercles on the root system of the plants in a available form of plant food for future crops.

The last week of May or the first week in June is usually the most suitable time for planting, although the time of planting may vary slightly according to district and season, but should not be delayed after the soil has become warm and dry.

Some of the best yielding varieties of field beans are Pearce's Improved Tree, Schofield Pea, Medium or Navy, Common White Pea and white Wonder. These varieties require from 112 to 115 days in which to reach the proper stage of maturity for harvesting.

After planting, but before the plants appear, which will usually be from three to six days, depending largely upon the weather, it is advisable to harrow the soil lightly with a slant-tooth harrow or even a light smoothing harrow. This operation will break the crust, destroy weeds, help warm the soil and stimulate rapid germination of the seed and growth of the plants. As soon as possible after the beans are up, and can be seen in the row, the single and two-row cultivators should be used. It should be aimed of every grower to keep the soil stirred on the surface. Thus as promptly as practicable after each rain and in time to prevent the forming of a crust the soil should be stirred by means of the cultivator. The work of cultivation also should be kept well in hand early in the season so that little cultivation need be given after the blossoming stage of growth has been reached.

## A Better Name.

There is a clergyman in an Ohio city who is very proud of his record as a marrying parson.

"Why, sir," said he to a Cincinnati man who was visiting him, "I marry about fifty couples a week, right here in this parsonage!"

"Parsonage?" returned the Cincinnati man, "I should call it the union depot."

Fight the fly with cleanliness, tidiness and ventilation.

# 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, 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 correspondence for this department to Mrs. Helen Law, 235 Woodbine Ave., Toronto.

"Reader"—1. Eggs should be preserved in water glass during March, April, May and June, when they are cheapest. 2. Protect the young cucumber plants from the striped beetle by covering them with wire netting. Spray with Bordeaux-arsenate of lead as soon as the plants appear; again at the appearance of the third leaf and a third time before the plants begin to form runners. See that the spray strikes under the leaves as well as on top. For the cabbage worm, dust with tobacco dust, pyrethrum, hellebore or spray with arsenate of lead or powder with dry arsenate.

"Enquirer"—Balfour is pronounced Bal—as in balance—foor. It is very hard to convey the exact pronunciation of Joffe by phonetics, but the J is soft and the re is hardly sounded at all; it is almost as though it was written Joff, with the fs a mere breath. Viviani is pronounced Viv-e-ane.

J. D. V.—The following are the dates at which the several nations entered the European War:

1914, July 28, Austria and Serbia; August 1, Germany and Russia; August 3, France; August 4, Belgium and Great Britain; August 8, Montenegro; August 23, Japan; November 5, Turkey.

1915, May 23, Italy; June 3, San Marino; October 14, Bulgaria.

1916, March 8, Portugal; August 28, Rumania.

1917, April 6, United States of America; April 7, Cuba.

A. J. L.—1. In the partly shaded location you describe, you should be able to grow lettuce, early or late cabbage, cauliflower, or spinach. Do not try beans, eggplants, corn, tomatoes, etc. 2. Dahlias roots need warm soil and warm weather, so it is not safe to plant them at this time.

"School Girl"—The cause of the so-called "blackheads" is the clogging of the pores with dust and grease, which hardens and pits the face with tiny black specks. The first step is to thoroughly cleanse the skin. Every night wash thoroughly with warm

suitable time for planting, although the time of planting may vary slightly according to district and season, but should not be delayed after the soil has become warm and dry.

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When we consider that a five-dollar calf may grow into a hundred-dollar cow, it seems preposterous to send it to the butcher.

Too many farmers do not realize the feeding value of skim milk. They think that because the fat has been removed a much larger quantity of milk should be fed. As a result, the calves are often overfed.

## That Feminine Intuition.

When a man is in love with a girl he should tell her as a matter of fact, though the chances are that she knew it before he did.

The man who introduced thimbles to England was John Lofting, a mechanic and metal-worker of Holland, who settled in England in the latter part of the seventeenth century, and practiced their manufacture in various metals with great success.

# Health

## Bathing The Baby.

As adults cannot properly maintain health unless frequent bathing is indulged in, it is hardly fair to expect a baby to be well and comfortable unless it is kept clean.

The baby should be bathed every day, during the first few weeks of its life, the directions of a physician or nurse should be followed carefully even regarding baby's bath.

When the mother takes this duty upon herself, however, she will probably find it most convenient to bathe the baby in the morning. A good time is just before midmorning feeding and after the bowels have moved. A baby should never be bathed just after feeding time. Before the mother starts to prepare the baby for its bath she should first see that her own hands are thoroughly washed to remove all dirt and germs.

The temperature of the room in which the baby is to receive its bath should be about 72 degrees. Care should be taken to see that it is not warmer, for then there is danger of the infant's becoming chilled when taken into another room after the bath is finished.

In winter time it is well to protect the infant from drafts while it is in the tub by means of screens or by hanging blankets over a row of chairs.

After a baby is several weeks old a little bath tub made for the purpose can be used unless the doctor orders otherwise. When a porcelain basin is used, see that it is slightly warmed before being filled with the baby's water.

The bath water should be at body heat or even a trifle above, which means from 98 to 100 degrees. The mother who has no bath thermometer can test the water with her elbow. When it feels neither hot nor cold it is right for the baby.

Two things mothers should be exceedingly careful about are: First, not to add hot water to the bath while the baby is in the tub. Secondly, never to leave a young baby alone in a tub of water.

Unnecessary exposure of the baby to the danger of a chill can be avoided by having soap, towels, clean clothing and powder at hand near the tub. The mother should be careful not to use too much or too strong a soap. She should rinse the baby's body carefully after washing and should rub but lightly when drying with soft towels.

Wash the baby's head first. While cleansing the scalp lower the infant's head a little so that the soap will not get into its eyes. Next soap the baby's entire body, using a bland white soap. Quickly and carefully sponge off its body, then lift out of the tub and wrap the child at once in a warmed towel.

When placing the child in the tub hold it with the left forearm under the neck and shoulders, the hand under its arms, lifting its feet and legs with the right hand.

## TESTING THE DENTIST.

Illustrating The Caution And The Selfishness of Orientals.

To illustrate Oriental habits of thought, Lord Cromer tells, in the Quarterly Review, this story of Ismail Pasha, Khedive of Egypt. It once happened that Ismail was suffering from toothache. He sent for a European dentist, who told him that he ought to have the tooth out. Ismail said that he was afraid it would be very painful. He was informed in reply that, if he would allow the dentist to administer laughing gas to him, he would feel nothing. He still doubted, but told the dentist to bring his apparatus to the palace and he would then discuss the question.

The dentist complied, and explained the process to the Khedive. Ismail then summoned an attendant and told him to send up the sentry who was at his door.

When the man arrived the Khedive ordered him to sit down in a chair, and requested the dentist to take out a tooth on either side of his jaw. Ismail then asked the man whether he had felt anything, and the man told him that he had not. But Ismail was not yet satisfied. He said that the sentry was a young, strong man, and that he would like to see the experiment tried on some one of weaker physique.

Accordingly he summoned a slave girl from the harem and had the dentist extract two of her teeth. Finding that she did not show evidence of extreme suffering, he then consented to have his own tooth out. It is related, although possibly that part of the story is apocryphal, that the dentist then received an order on the Egyptian treasury for one thousand pounds.

Putty for glazing should contain 10 per cent. of white lead to withstand the weather.

The old remark about a red evening and a gray morning as indicating good weather (alluded to in the Gospel of St. Mathew) still holds good as well as that which says that a red sky in the morning foretold bad weather with much rain and perhaps wind. One of these remarks has taken form in the "A red sky at night is the sailors' delight; a red sky at morning is the sailors' warning."

# The Doings of the Duffs.

