Farm Crop Queries

CONDUCTED BY PROF. 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. When writing kindly mention this paper. 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.

C. K.:—I have ten acres of land about one-half sand loam, balance light sand, which is pretty badly run down. Have a good market for berries and truck and would like to know how to treat the soil for best results for the following crops, which I have the best market for: asparagus, rhubarb, onions (bunch and mature), potatoes, cabbage, tomatoes, cucumbers, sweet corn, strawberries, blackberries, red raspberies, and cherries. Which of these will do best on this kind of soil?

Answer:—I assume that you do not wish to grow simply one crop on your farm, but you would like to know which crops you should specialize in and how best to handle the land. Two things are especially needed under your conditions, one is humus and the other plantfood. Strawy manure is of course a splendid source from which to get humus. Apply all of this that you can obtain at a reasonable price. As soon as your garden crops are off,—such crops as onions, potatoes, cabbage, tomatoes, cucumbers, and sweet corn,—sow a mixture of rye and fall wheat. Do this so as to get a covering for the soil which will prevent winter washing. This material coming along early in spring will make a fairly rank growth by the time you have to plow it under in preparation for your gardening operations. You will have to make liberal use of high grade fertilizer, applying as high as 750 to 1200 lbs. per acre for such crops as onions, potatoes, cabbage, and sweet corn. Use fertilizer of an analysis running as high as 5% ammonia, 8% phosphoric acid and 4 to 6% potash, working this thoroughly into the soil at the time the crops are planted. After your early spring cultivation of blackberries, raspberries and cherries has ceased—about the first to middle of July—sow the same mixture of cover crop, plus a little clover, among these latter crops. This again will form a cover crop to turn under the following spring. Applying the fertilizer as advised, or a fertilizer carrying about 4 to 5% ammonia and 10 to 12% phosphoric acid to the cane fruits, will give good results. This should be applied in spring just at the time cultivation begins.

J. S.:—I want to grow some cabbage. I have a piece of clay loam soil that I have had in sod and cut hay from, for two seasons. Could I expect a crop of cabbage on this, and what amount of fertilizer should I use?

Answer:—It would be better if you could pick out a piece of land that has not been in sod last season. The piece you have in mind would have been all right if it had been plowed last fall. Of course it will give results if plowed early this spring. My idea was that the sod turned under will have rotted more completely had the fall plowing been done. Under either case, of course, you can expect a good crop of cabbage. To assist your soil toward this end I would advise you to use as high as 750 to 1,000 lbs. per acre of a fertilizer running about 4 per cent. ammonia, 8 per cent. phosphoric acid, and 4 to 6 per cent. potash. Work this into the soil as the seedbed is being prepared, saving a little to apply around the cabbage as they are being set. Do not let it come in contact with the plant or the plant roots, unless it has been mixed with the soil.

A. J. K.:—I have eight acres of wheat that I would like to seed this spring. It was sod plowed for corn, then to oats, and now wheat. Most of it was manured last fall. I put on two tons of lime per acre. Do you think it advisable to seed to alfalfa in the wheat?

Answer:—I assume your field is in fall wheat at the present time. Exceedingly good catches of alfalfa have been obtained by sowing the alfalfa seed right on top of the growing wheat, especially when the wheat has been fertilized. One of the leading alfalfa growers of Wisconsin has for years spring top-dressed his grain with a fertilizer analyzing about 2 to 3 per cent. ammonia, 8 per cent. phosphoric acid, and 2 to 3 per cent. potash, using it at the rate of 250 lbs. to the acre. This is scattered right on top of the fall wheat and the alfalfa sown. Light harrows are then run over the patch, turning the teeth of the harrows back so that they will not drag out the growing wheat, and harrowing the ground with the drill rows and not across. This stirs the ground just sufficiently to bury the seed and work in the fertilizer, which results in a considerable advantage in the wheat itself and almost insures an alfalfa catch.

D. C.:—I would like a little information in regard to Sudan grass for sheep pasture, and the effect it has on ground for following crops, as I intend to put the above into wheat next fall. That is pasture with sheep until time to turn under for wheat, twenty-five acres to thirty-five sheep.

Answer:—Sudan grass is not a pasture grass, speaking generally, but is grown for hay. It makes very rank growth, reaching a height of 4 to 6 feet, and compares with some of the ranker growing millets. It grows luxuriously down the south-eastern coast, under semi-arid conditions, but is not advised where better quality grass can be grown. A mixture of timothy and clover, I believe, would suit your purpose much better in Ontario, than attempting this newer material which is rank and poorly adapted to the purpose for which you are growing it. If you want an annual pasture to use this coming spring a mixture of wheat and oats with a few pounds of clover seed thrown in produces good annual pasture mixture in about six weeks. Use 1 bushel of each grain per acre.

S. M.:—I have just moved onto a 160-acre sandy, gravelly farm, and I believe, pretty badly run. I wish to sow oats and peas this spring for quick hay. Are the peas sowed first, plowed in, and then oats broadcasted, or can I broadcast together and harrow in? Tell me just how to get the best results. What can I put in an old orchard sowed to June grass and used as a pasture? Don't wish to plow it, not this year.

Answer:—You can get very good results from sowing a mixture of peas and oats for a good hay crop. Use a bushel of each to the acre. These may be sown at the same time. Best results, of course, will be gotten by drilling them in with a grain drill, and I believe in view of the run-down condition of the soil it should pay you well to add 200 to 300 lbs. of fertilizer analyzing from 2 to 3 per cent. ammonia, 8 per cent. phosphoric acid, and 2 to 3 per cent. potash. This would give early food for the oats and peas as they sprout and would mean an additional yield which would pay big interest on the money invested in fertilizers. The best thing to do would be to get a drill with fertilizer-dropping attachment. Relative to the orchard, you do not say whether you intend to clean the orchard up or simply let it stand until you can destroy it. Assuming that the latter is the case and you do not wish to plow it this year, I would advise you to scatter some clover seed on top of the ground and to-dress the soil with fertilizer at the rate of about 300 lbs. to the acre. You should use fertilizers high in nitrogen, 4 to 5 per cent. and about 10 to 12 per cent. in phosphoric acid. It will be well to apply the fertilizer first, then scatter the seed, then harrow the sod if possible so as to work the seed into the ground slightly. This should make growth which would give you some good hay.

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Game as Their Name

Poultry

Most hard-and-fast rules respecting manure removal are made only to be broken. Some commercial poultry keepers—successful ones, too—clean the roosts only twice a year, in spring and fall, and are skeptical of the practical features of any other policy. It is not slovenliness on their part, either. They dispense with dropping-boards and let the manure accumulate in a boarded-off space on the ground. Occasionally they throw absorbents on the pile.

A big Plymouth Rock poultry farm is proud of its efficient manure-removal system. Through a carefully planned combination of convenient roosts and overhead metal litter carrier, it removes the manure of 1,600 birds and deposits it in an outside, covered concrete manure pit, all in thirty-five minutes. On a farm where Leghorns and Reds are both kept, manure of 500 birds is removed in ten to twelve minutes.

At two times frequent manure removal from dropping-boards is of especial importance. One is the warm months when mites may become a big drain on the flock. The practice of some of the commercial poultry farms is to clean daily, and to paint the roosts every fortnight with a coal-tar disinfectant. Of the two measures, they declare daily manure removal does more to defeat the mites.

Special roost-cleaning tools are on the market, or they can be improvised at home. A good scraper helps to make the job easy. When the henhouse has board floors, at cleaning time manure will sometimes be found dried to the floor in spite of the deepest litter. Water will soften the material, and permit a thorough cleaning job. At cleaning times it always is a wise precaution to disinfect.

The plant-food value of poultry manure is appreciated everywhere. The poultryman close to town or city, or in a district where intensive agriculture rules, never has trouble selling it at a good price. The range of prices is 50 cents to $1.25 a barrel, with considerable quantities sold at $1. More poultry keepers choose to use it on their own land. It must be stored in a protected place, as it quickly loses its value when exposed to the weather.

Bedtime Stories

A Rainy-Day Magician.

The clouds were gray and weepy-faced, the woods aloof and cool;
The flowers looked mussed and sleepy-faced like children tired of school.

Then Robin, Spring attending him, came hippy-hop along,
With nothing recommending him except his little song.

He filled a dreary vale or two with tuneful exercise,
Then ran a merry scale or two to cheer the rainy skies.

The skies composed right wittily a rainbow in reply;
The meadows answered prettily with bud and butterfly.

Not one for dilly-dallery, Friend Robin looked around—
Then drew his well-earned salary, a worm, from out the ground.

The Sunday School

INTERNATIONAL LESSON, APRIL 11.

Deborah and Barak Deliver Israel—Judges 4: 4-5, 31. Golden Text —Psalm 46: 1.

4: 4-5. New Deborah. The first four verses of the chapter are the introduction provided by the editor of the book. They tell us of the evil-doing of Israel and the oppression of Jabin, king of Hazor, and his captain, Sisera, whose home was in the northern part of Palestine (see Josh. 11: 1-15), and over whose king and people at an earlier time Joshua had won a great victory. Now they had recovered power and were using it against Israel. The historian tells us that the king "mightily oppressed the children of Israel" (4: 3). The Song of Deborah (chap. 5), says, the high ways were unoccupied, and the travellers walked through by-ways for fear of their enemies.

The people, held miserably in subjection, lacked food, and they had not even weapons of war with which to fight their oppressors.

Deborah was a prophetess. She was inspired by Jehovah. Because the people of that part of the country believed her to be so inspired they invested her with authority. They came up to her for judgment. Her home was between Ramah and Bethel, a little to the north of Jerusalem.

67. Called Barak. Deborah had courage and faith in God. But she needed the strong hand of a capable man, a trained soldier and leader of the northern tribesmen. Therefore, she called Barak, whose home was in the north, near the Jordan river and the lake of Hulah, and who, no doubt, had been one of those to suffer most at the hands of the Canaanite enemy. "Deborah" means a "bee," and "Barak," "a flash of lightning." This combination of the bee and the lightning gave promise of a stinging blow against the oppressor. The busy activity of the woman, her wisdom and resource, and the strength, determination and lightning-like swiftness of the man, made for victory. Mount Tabor, at the north-east end of the plain of Esdraelon, was chosen as the rallying point. Barak was bidden to call the tribesmen of Zebulum and Naphtali, over whom he had already some influence and authority. The chosen battleground is the banks of the river Kishon, always treacherous in times of flood but well known to the men of Israel. Deborah's instructions to Barak are given as the word of Jehovah.

8-9. If Thou Wilt Go With Me. Barak did not lack courage, but he saw with a soldier's understanding the magnitude and peril of the enterprise. If this woman of vision and of faith, through whose lips Jehovah spoke to him, would but go with him, then he felt assured of Jehovah's blessing and so of success. Deborah's answer was prompt and spirited, "I will surely go." But, she said, the honor of the enterprise will go to a woman.

10-11. At His Feet, that is, "after him." With his little army of ten thousand men, ill-equipped but stimulated to enthusiasm and daring by the presence of the heroic woman who promised victory, Barak marched to Tabor.

12-13. They Told Sisera. Nothing is said of the king's participation in the battle. Sisera appears to have put great dependence upon his chariots, but owing to the marshy nature of the country and the river floods they were probably of little use. The Hebrews had no chariots until the time of David (2 Sam. 8: 4). The chariot had a light wooden body, open behind, a single stout axle with two six to eight spoked wheels. The pole was fixed into the axle, bent up in front, and fastened by a band of leather to the front of the chariot. Two horses were harnessed to it; or rather yoked, for traces were not used. In Sisera's chariots of iron the woodwork was probably strengthened by metal plates. Two or sometimes three men were assigned to each chariot, one of whom was the driver, a second the shield-bearer, and the third, the fighting man armed with bow and spear.

14-16. This Is the Day . . . Is Not the Lord Gone Out Before Thee? Deborah's faith was simple, direct and very great. She was led to believe that this was the divinely appointed day, and like Moses and Joshua, she believed that Jehovah went before the armies of His people into the battle. For among the earliest ideas of the people of Israel about Jehovah was this that He was a God of war, fighting His people's enemies. "The Lord is a man of war," they said. He is "Captain of the Lord's host;" He is "the Lord of hosts, the God of the armies of Israel," "the Lord strong and mighty, the Lord mighty in battle." So even in Christian literature, in the imagery of the Apocalypse, Christ is "portrayed as a warrior riding on a white horse to the final conflict with Anti-Christ" (Rev. 19: 11-16).

The Lord Discomfited Sisera. The battle was fought, no doubt with courage and skill, but it was the invisible leader who gave the victory. There was a storm, a heavy fall of rain, a swiftly rising flood, and the enemy was caught upon soft and treacherous ground, amid marshes and quicksands. It seemed that heaven and earth had conspired to overthrow and destroy the enemy. It was surely the Lord's doing.

The lesson story goes on to tell of the flight of Sisera, and of his murder in the tent of Heber, the Kenite, by Jael, the wife of Heber, a murder which seems shocking to us but was regarded as justifiable and praiseworthy in the minds of the people of that primitive age (see 5: 24-27). It has taken the world a long time to learn the lesson of forgiveness to an enemy and to overcome the passion of revenge and hatred, and not even yet is that great lesson rightly learned. The student will do well to compare the Song of Deborah with the lesson story, and to notice its intensity, its passion, its graphic power, and its dramatic qualities which find expression in successive vividly presented scenes, proceeding rapidly to a climax in which the tidings of defeat and death reach the mother of Sisera and her companions, who are eagerly looking through the latticed windows for the return of the victors.

A well-kept woodlot or a plantation of forest trees on the steep rocky portions of the farm will help make the place more attractive.

YOUR PROBLEMS

BY MRS. HELEN LAW

Address all communications for this department to Mrs. Helen Law, 235 Woodbine Ave., Toronto.

The Twins' Grandmother: Please give a list of pretty names for boys and girls; we want something unusual.

In your quest for something "unusual," avoid names that are made up by relatives or friends, and avoid also peculiar spelling of old and familiar names. In every case the child's last name should be taken into consideration, for the given name and the surname should harmonize. Choose carefully before going outside the realm of such good old standbys as Margaret, Elizabeth, John and Edward, which combine well with most family names.

A well-chosen name is an asset not to be overlooked, for either the sight or the sound of it makes a pleasing impression, often paving the way to pleasant or advantageous things, while an absurd name may become a handicap, sometimes a veritable burden.

Girls' names not in general use, are Adelaide, Agnes, Alice, Barbara, Beatrice, Christine, Clara, Dorothea, Eleanor, Emilie, Frances, Grace, Gertrude, Helen, Hilda, Ida, Isabel, Jean, Janet, Jessica, Julia, Laura, Lucy, Louise, Marion, Mariam, Olive, Pauline, Ruth, Sidney, Sylvia, Theodora, Ursula and Winifred.

For a boy choose one of these names: Alan, Alfred, Arthur, Bertram, Charles, David, Douglas, Donald, Edgar, Edwin, Francis, Geoffrey, Gordon, Horace, Lawrence, Lewis, Malcolm, Oliver, Paul, Philip, Richard, Robert, Stephen, Sylvester or Theodore.

In naming a boy, a family name (sometimes the mother's maiden name) can be used with good results. Everett Smith is a good example.

Nicknames and abbreviations have their place in the family circle and among friends, but the child's name should always be registered in its correct form, not as "Lollie" for Laura, "Flossie" for Florence, and "Willie" for William. School work and, later on, business letters and letters sent to strangers should be signed with the name in its correct form, for a communication signed "Cad Flite" does not seem of so much importance as one signed Catherine Flite.

Women and girls err in this respect far more than men, but they are realizing that while we may prefer to be "Lou," "Mamie," or "Sadie" in the home circle, Louise, Mary and Sarah are better for business purposes, as "Johnnie," "Willie" and "Bobby" learn early in life.

Ruth: You should accept the first invitation that a young man offers you even though he may not be just the one you would choose. It is only courteous and fair. It may teach the "right man" too, to be a little more prompt. I think you did right in that other affair but, my dear, are you not a bit young to be thinking so seriously of such things?

Story-writer: The only way to discover the value of a story is to send it to the magazines. Type it carefully, numbering the pages; put your name and address at the upper right-hand corner of the first page and the number of words at the left corner and enclose a self-addressed and stamped envelope in case of rejection. Use paper 8 inches by 10 and fold twice. As you have not given me any clue as to the nature of the story, I cannot advise regarding the most suitable magazines. Don't be discouraged if your brain-child returns; just send it out again. Best of luck!

Discouraged: My mother is old-fashioned and will not try any of the new devices that make housekeeping easier. We have just installed electricity and can afford lots of new things. What can I do?

Youth loves to experiment and venture and I have the utmost sympathy with you, dear. On the other hand, Experience, which your mother represents (this sounds like an allegorical play!), knows much of which Youth is still ignorant, so I cannot well take sides. I will, however, tell you of an experience of a friend of mine who visits her mother on the old farm every summer. When they installed electricity she wished her mother would buy some of the new housekeeping devices but her mother, like yours, would not. So she arranged a compromise. In her own home she always drained her dishes in a wire drainer, and though her mother did not approve, she did it when she washed her mother's dishes. So one morning she said: "Mother, I'll agree to do the dishes your way if you will give this vacuum cleaner I have sent out on approval just one trial." The floors all had heavy carpets and sweeping was hard, backbreaking work. My friend cheerfully kept her part of the bargain and did not even ask her mother how she liked the vacuum cleaner, but it did not go back to the dealer.

KEEP TRYING

"When first the child begins to imitate,
Do not the little effort under-rate.
Do thou the same, it will the more delight him
And ever to renewed attempts invite him."

The way lay through a cheery part of the city, down a long hill. Grass plots and flower beds bordered the path and sometmes little children played among them.

The sunlight flashed an arrow of gold down the incline, and I could see a child alone, sitting upon the pavement. Apparently he was most intent. His hands were busy and his sunny head bent close over his undertaking.

As soon as I approached he seemed to realize my presence, though he was too busy to look up until I was quite close to him. He was very small, brown-eyed, and very winsome.

His hand grasped a piece of crayon, and as his eyes critically surveyed his drawing on the walk, he said, including me now within his glance:

"I've made another kind of an 'S'."

"So you have," I replied, but the questioning look in his eyes made me inquire:

"What troubles you?"

"It's-it's another kind," he replied uneasily. Before him was a well-drawn letter "S" about a foot high, exexcuted with the swinging stroke of a strong and skillful arm; beside it executed with the swinging stroke of the letter. He saw the difficult curve to the left, but he could not make it, so turned to me for help.

"Shall I finish it?" I asked.

With a sigh of relief he yielded the crayon.

"Who made this one for you?"

"A man," he answered. Evidently he was acquiring his instruction as the opportunity permitted.

"There!" he cried with satisfaction when I made the required stroke. "There it is!"

"How old are you?" I ventured, for he looked too little to be concerned with difficult curves.

"Most three, I think," he said.

Later I learned from his proud little mother that he knew "nearly all of his letters," and that he had learned the letter "S" soon after he was two years old.

An unusual child? Yes, but with greater possibilities come graver responsibilities.

Parents sometimes fail to realize that the young child needs widely varied activity and constant direction to awaken and broaden his interest rather than the over-stimulation which induces him to "go far" with some one kind of play.

The ordinary interests of a three-year-old boy lead him to convert the dining room chairs into horses, or the sofa into an automobile. He first takes an interest in things that move, then in things that make a noise. By imitating in his play the life about him, a child unconsciously develops some understanding of it; then when one phase of activity ceases to interest him, he turns to another to "play" that while his interest lasts.

The young child is tremendously alert, vital, experimenting at life first-hand: LIVING! For most of them experience must be the great educational factor. Froebel appreciated this fact and chose the windmill with its attractive motion as a symbol of the child's experimental interest.

The wise parent always avoids extremes with even the "most unusual" three-year-old; but has care for his normal development, since that is the most urgent need for little folks.

Encourage the experiments of children, but never force them; let them keep trying.

It Pays to Plan Your Work.

In present times of high production cost, many farmers are finding that it pays to re-arrange their farms with regard to economy and efficiency of operation. It has been noted in a number of cases that well-arranged farms have brought a higher price on the market, particularly where there is easy access to the fields from buildings and highways. It takes an average of 53 work hours to produce an acre of corn on rectangular fields, containing 10 to 15 acres, while the time required in irregular fields of the same area was 61 hours. Where tractors and large horse-drawn implements are used, the advantages of the long and regular shaped fields are very evident. Many farmers are now draining wet spots, removing trees, stumps and brush, and straightening fences so as to make their farming operations easier. In the olden days it didn't matter if it took a few more hours to do a certain job. With the present scarcity and cost of farm labor it does. Often the land reclaimed pays the expenses of rearrangement the first year.

The homes of a nation are its strongest forts.

Reaching the top of a ladder is an incident, but staying there is an achievement.

Economy is not always doing without things. It is making them do the best they can.

The world's nut trees are said to be capable of supplying nourishment to its entire population.

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