Farm Crop Queries

Conducted by Professor Henry G. Bell

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.

R.B.:—I have a field of timothy sod I am ploughing and was intending sowing spring wheat on it. The soil is clay loam. Does spring wheat yield well on timothy sod or would you advise me to sow oats? How much spring wheat should I sow per acre? Would you advise sowing fertilizer?

Answer:—I see no reason why you should not get good results from spring wheat following timothy. In the Connecticut Valley, timothy is grown as a source of organic matter in preparing soils for tobacco crops. Excellent results are reported. If the timothy sod has been fall plowed, it should be a comparatively easy matter to prepare a satisfactory seed-bed for wheat in the spring. In seeding spring wheat at least a bushel and a half of good seed per acre should be sown. You will find it highly profitable to drill in from 200 to 300 lbs. of fertilizer per acre at the time you are seeding the wheat. If your seed drill does not have a fertilizer dropping attachment, the fertilizer can be broadcasted the same as lime, just before the last disking. The disking and harrowing of the land will work it in so that the available plant-food will invigorate the young growing wheat.

On your soil I would advise your using a fertilizer carrying 2 to 4 per cent. ammonia, and approximately 8 to 12 per cent. available phosphoric acid.

T.H.:—I seeded a twelve acre field in the spring of 1916 with seed clover for pasture. Will it make good pasture next summer or would you advise plowing and seeding in wheat next spring? The pasture was excellent.

Answer:—Your clover seeding should yield you good pasture in the spring of 1918. Whether or not you should plow it up will depend upon how much livestock you have on hand and how much pasture they will need next summer. If you can spare any of the pasture for growing wheat, clover sod plowed under will make an excellent seed-bed for spring wheat.

M.C.:—I have a field in the former bed of a creek. The water is now confined to a ditch and the field is tile drained. The fine silt of this field does not produce as good crops as neighboring clay land. What will improve the soil?

Answer:—The possible trouble with the soil in question is that it is too compact. Fine silt is packed together so closely that air does not circulate sufficiently within the area of the soil where the crop roots seek their food. I would advise you to get a stand of clover on the field as soon as possible, and then plow under the second crop. If you have on hand strawy manure, it will greatly benefit the soil if you will fall-plow the soil, spread the manure in the spring and work it in by disking and harrowing. If you are planning to seed the field to wheat or other grain, and clover next spring, you will do well to add 200 to 300 pounds of fertilizer to the acre. This will give both the wheat and the clover a vigorous start. The analysis of fertilizer mentioned in answer to R. B. should give good results under your condition.

W.G.:—1. Will orchard grass do well on low, wet land? 2. What is the best crop to follow beans? Soil is not very strong.

Answer:—1. Orchard grass thrives on a variety of soils. If the ground is not too wet, you can look for fair crops from this grass. As a rule Red-top grass does best on extremely wet soils. 2. Grain crops seeded to clover are valuable as follow-up crops where beans are grown. If you intend to grow wheat following the beans, it will pay you to fertilize the ground as in answer to R. B.

M.F.:—What is the feeding value of clover silage and how does it compare with corn silage?

Answer:—Henry gives the following comparisons of corn silage and red clover silage:

	Total dry material in 100 lbs.	Digestible nutrients in 100 lbs. Crude Protein	Carbo-hydrates	Fats.
	lbs.	lbs.	lbs.	lbs.
Corn	26.4	1.4	14.2	0.7
Red clover	28.0	1.5	9.2	0.5

The Canadian Experimental Farms have tested clover silage, versus corn silage to some extent at Agassiz, British Columbia. They report favorably on the results obtained from the clover silage.

Ohio Experiment Station reports that clover silage stored satisfactorily and was eaten readily by the livestock.

F.R.:—What is your opinion of the value of basic slag?

Answer:—Basic slag is a carrier of a small amount of soluble phosphoric acid. It is phosphoric acid that causes the corn plant to ripen, and has considerable to do with the filling out of the kernels, both of corn and small grain. In phosphate rock, the phosphoric acid is almost insoluble. In basic slag it is slightly soluble, some running about 12 per cent. available phosphoric acid. In acid phosphate the phosphoric acid is most available running usually about 16 per cent. One of the arguments used in favor of basic slag is that it carries a considerable amount of lime. Director Thorne of Ohio has recently said, concerning this latter point:—

"That basic slag cannot take the place of lime for correcting soil acidity is shown by long-time tests at the Ohio Agricultural Experiment Station. Economy and effectiveness have been in favor of lime.

"Yields of clover and timothy hay in a 5-year rotation of corn, oats, wheat, clover and timothy at Wooster have been increased as a 12-year average 1,237 pounds to the acre by the addition of 2 tons of finely ground limestone to a plot receiving complete fertilizer with phosphorus in basic slag. Corn has yielded 3.4 bushels more to the acre on the limed than on the unlimed part of this plot, although oats and wheat have not been benefited by the application of lime in this case. Increased crop yields have returned far more than the cost of liming, at present market prices, on this plot where lime is used along with basic slag."

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Train Your Child Early in "Faith Thoughts"

By Dr. Lena K. Sadler.

A little child is the most imitative creature in the world. Long before he is out of his little pinafores he endeavors to talk and act just as he sees the older members of the family do. It is because of this inherent tendency to say and do those very things which he hears others say and do, that, if faith-thoughts are early and constantly suggested to the unfolding mind of the child, they will assist greatly in evolving a character of joy, confidence and courage.

On the other hand, if fear-thoughts are continuously sown in the young mind, they will eventually distort the emotions, deform the conceptions and wholly demoralize the health and life activities of the growing child. Within the limitations of the possibilities of hereditary endowment, and in view of this wonderful imitative nature we are able to make a child almost anything we desire; not "an angel," in the ordinary acceptation of the term, but a child who knows his place and possesses the power of normal self-control.

It is during the very early years—from 2 to 5—when the imagination is most plastic and vivid, when the child's imitative instinct is so unconsciously automatic that the initiation of good habits will find the best opportunity for healthy growth and development.

Happiness Contagious

If the parent will make sure that self-control is established and that the little child has learned that a fit of "angered crying" gets him absolutely nothing, then may that selfsame parent expect to see develop upon that foundation a strong and noble character.

"Baby's skies are mamma's eyes" is just as true as it is pretty and poetical. Be it far from me to criticise a tired, worn-out mother exhausted by an avalanche of household cares and catastrophes, for her occasional irritability; but, nevertheless, her little 2 or 3 year old child will unconsciously partake of her selfsame spirit. When mamma is happy the little children are happy. When mother is sick and nervous the child is impatient and irritable. An older child reasoned it out this way one day: "When I'm cross it's temper and mamma whips me for it, but when mamma is cross, she says it's 'nerves.'"

It is indeed a pity that at this very time of a child's life, when we can influence him the most, that so many thoughtless parents fill the child's mind with the unhealthful fear-thought. "The bogie man'll get you if you don't mind mamma," or "I'll get the black man to cut your ears off," or "the policeman is around the corner to get bad little boys," are familiar threats which are so frequently made to little people.

Fear Distorts the Mind.

These efforts to terrorize the young child into obedience never fail to distort the mind, warp the affections, and, more or less permanently, derange the entire nervous system. The arousal of fear-thoughts and fearful emotions in the mind of the growing child is very often such a psychologic and physiologic shock to the child that the results are sometimes not wholly eradicated in an entire lifetime.

Just see how far we carry this unwholesome introduction of fear-thoughts even to the Almighty. Thousands of us remember being told as a child that "God doesn't like naughty children," or "God will send the bad man to get you if you don't be good." Thus, early in life, an unwholesome fear of the Great Father, the Being whose character is love, sympathy and compassion, is sown in the mind of the child, and, as time passes and the child becomes a man, these fears and distorted beliefs grow and come so to possess the mind that they often mold the character and shape the religious beliefs of the individual. To the child who has been reared to dread God, who has come to look upon the Creator as an ever present "threat," it requires well-nigh the supernatural to convey the beautiful teaching of the fatherhood of God and the brotherhood of man.

The Sunday School

INTERNATIONAL LESSON
NOVEMBER 25.

Lesson VIII. A Psalm of Thanksgiving—Psalm 103. Golden Text, Psalm 103. 2.

Verses 1, 2. The psalmist summons all his faculties to praise Jehovah. Soul—The entire personality. Similarly, "all that is within me," refers to the whole being. Holy name—See comment on Neh. 1. 11 in lesson for No. 11. The psalmist is thinking of Jehovah revealing himself as a holy God. For the sake of emphasis the summons is repeated in verse 2. Forget not—Forgetfulness is the secret of much ingratitude. Benefits—Or, "kind dealings," as set forth in the succeeding verses; they include forgiveness, healing, redemption, provision for the psalmist's needs, etc.

3-5. These verses emphasize the characteristic activities of Jehovah. Forgiveth—The greatest of divine blessings, which Jehovah had to bestow throughout the history of Israel (Exod. 34. 7). Healeth—Afflictions of body and spirit. If the psalmist is thinking of the nation the verse refers primarily to the judgments which have come as punishment for national sin. (See Deut. 29. 21.) Redeemeth . . . destruction—The noun, better translated "pit," denotes Sheol, the place of the departed. The expression is often used figuratively of deep distress; in the life of the nation, of the exile; if so here, the redemption would be the deliverance from exile. Life—The same as "thee" or "thyself" (compare verse 1). Crowneth—"He makes his children kings and weaves their crown out of his own glorious attributes of lovingkindness and tender mercies." Desire—A word of uncertain meaning. Jehovah gives to his children always and in abundance that which is good for them.

6-10. Jehovah's gracious dealings with Israel. Righteous acts—Acts revealing Jehovah's righteousness, in the special sense of loyalty to the covenant relation between himself and Israel; here, acts of deliverance. Judgments—Acts of judgments, against Israel's enemies, the oppressed being the nation. Ways . . . doings—His methods were revealed in the days of Moses in the deliverance of Israel and the destruction of the Egyptians; but Jehovah was also active throughout the entire history of Israel. Chide—Or, "contend." There are times when it seems as if Jehovah were angry and quarreling with his people, but this cannot endure. The psalmist is fully aware that the blessings enumerated have come to the people not because they were merited, but solely because of the divine lovingkindness.

11-14. The psalmist dwells at greater length on the greatness and tenderness of Jehovah's love. Fear—See comment on Neh. 1. 11 in lesson for Nov. 11. The figure in verse 12 denotes the completeness of the removal of sin. Back of the pardoning grace is the divine compassion. Pitieth—Or, "has compassion." Back of the compassion is the divine knowledge of man's weakness. Dust—Man being of the earth earthy, he has of course low, carnal elements in his make-up. Jehovah knowing this sympathizes with him.

15-18. Though man is frail and transitory, the lovingkindness of God endureth forever. Wind—The east winds of Palestine are "dry and parching, withering all the vegetation." Righteousness—Loyalty to the covenant leads Jehovah to bestow blessings even when punishments are merited.

19-22. Since Jehovah is universal king, all creation is summoned to unite in his praise. Heaven—Calls attention to the transcendence of God (see comment on Neh. 1. 4 on lesson for Nov. 11), as also to the permanency of his rule; his abode is free from the disturbances that overthrow kings and governments. Angels They form his court; as Jehovah's warriors they must be mighty in strength; they obediently do his bidding. Hosts . . . ministers Celestial beings subordinate to the angels. In verse 22 the whole realm of nature is summoned to join in the praise-song of the angels.

Kerosene Helps.

The uses of kerosene are many, and all housewives are familiar with some of them. The best is worth saving.

A cup of kerosene to a pail of water will put a gloss on your windows, oilcloth and linoleum. It will take grease from woodwork.

A rag wet in kerosene will clean the bathtub and wash-basin. It will take the smoke from granite kettles and clean paint where soiled fingers have smudged around the door-knob. It will take off the rust from the kitchen stove.

If your sewing machine runs stiffly, saturate the parts with kerosene and leave it on over night. In the morning wipe dry, then oil with a high-grade machine oil, and the machine will run like a breeze.

Cut the grease from your drains and sink by using kerosene on a brush.

Put some kerosene in your starch and see what an easy ironing day you will have. If your irons are rough wet a cloth with kerosene, and while the irons are very hot, rub them on the cloth vigorously.

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

Mrs. G. J.:—To make beads, mix 1 cup salt and 1 tablespoon cornstarch. Heat in oven and mold with the fingers into beads. A very little water or perfume added will furnish all the moisture required. Pierce with hatpin or darning-needle and bake in hot oven until dry. The beads may be colored with ink.

Perplexed:—1. What one says when performing introductions should be governed largely by circumstances, but there are certain set rules which are observed more or less closely by well-bred people everywhere. Study these until you are familiar with them and you will not be at a loss as to what to say. Always present the man to the woman. The younger woman is always presented to the older one, and a younger man to an older man. As a general thing an unmarried woman is presented to a married woman. In making introductions be particular to pronounce names distinctly. It is not enough to say, "My aunt," or "My sister." The name as well as relationship must be stated. Shaking hands is not often practised at a first meeting, unless the two have heard much of each other and wish to express special cordiality. Beyond the fact that youth always rises for age, and ordinary folk to meet the greatly distinguished, it is not necessary to rise for introductions. A woman never rises to greet a man unless she is the hostess, or wishes to pay him a special compliment for his age or distinction. A newcomer is never introduced wholesale to all the guests assembled. She is presented to one or two at a time, as opportunity offers. A pleasant form of introduction is in the form of a question, as "Mrs. Blank, may I present Mr. Smith?" Or, "Miss Blank, I wish to present Miss Jones." Or, "Mrs. Brown, let me introduce Mrs. Smith." 2. Sew the metal clasps from old stocking supporters on to your pot-holders. They can then be hung on a hook behind the stove.

Willing Worker:—How would you like the idea of a "box" table at the Red Cross bazaar? The boxes to be fancy ones for the holding of Christmas gifts. Have a "party" at your house some afternoon when the boxes may be made at slight cost. Provide pasteboard boxes of all sizes and descriptions, tubes of library paste, rolls of crepe paper, white, red, and of holly and poinsettia design, scarlet and holly ribbon, and Christmas "stickers" or seals. Pictures cut from magazines can be utilized, also small-patterned wall-paper. Best wishes for success.

Mrs. W. P. P.:—There i a pretty custom in Norse countries that soothes the impatient children who continually ask the question: "When is Christmas coming?" On the first day of December an ordinary wooden hoop is gayly dressed in evergreen, and to it at regular intervals twenty-four candles are attached. It is put away in a room by itself, and at dusk one candle is lighted.

That night when the restless question is asked, the mother with much mystery leads the little ones into the room where stands the evergreen candelabrum with its one lighted candle. Then she answers the question.

"Not until all the candles are lighted will Christmas be here," she says.

The children gaze in awestruck silence. The next morning there is indeed something new to talk about. And when that day in its turn rolls round to dusk again, the same ceremony is repeated. Only this time, wonder of wonders, two candles instead of one are pointing their cheery fingers upward.

So evening by evening do the children receive their message. And joy increases as candle after candle adds its blaze.

This Yuletide calendar is a source of never-failing delight to little Danish and Norwegian children, and the beautiful emblem might well be transplanted to Canada.

Poultry

Litter For the Poultry House.

During cold weather litter is a very important factor in egg production because on its use the activity and appetite of the birds largely depend. The busy bird is a hungry bird and the hungry bird is usually profitable. There are really three reasons for using litter.

1. Litter is thought of principally as a means of hiding scratch grain or any other feed which may be thrown down for the purpose of encouraging exercise. From this standpoint alone a hard fibrous litter such as coarse straw or corn fodder will wear well and prove very satisfactory.

2. Hens require a large quantity of bulk in their ration. During the summer this is picked up on the range, but during the winter it must be taken largely from the litter unless a very abundant supply of green food is kept before them. Litter which contains a large amount of succulent green leaves or blades such as clover hay or rowen not only promotes exercise but also provides a very good substitute for summer green food.

3. During changeable weather houses are very apt to get damp and it is an advantage to use litter with some moisture absorbing qualities so that frequent changing may remove dampness. From this standpoint a very dry, fine cut, fibrous litter is most satisfactory.

It is impossible to get any one kind of material that will have all the above qualities. A combination such as straw and clover or cut corn fodder and clover are very satisfactory. The addition of a little clover hay every few days will improve almost any kind of litter. Wheat, oats or buckwheat straw, unthreshed, provide both grain and litter in a very desirable form.

Litter must be changed frequently and kept sweet and clean if hens are expected to work in it and give best results. While many poultrymen who add litter occasionally and clean out houses only once or twice a year seem to be getting satisfactory results, much better results could be had by raking out all the litter and putting in new every three or four weeks. Changing this often may require a little more labor, but the amount used is not so much greater and the effect on the birds will more than make up the difference. It is advisable to shake out the litter frequently or rake it forward if it has been scratched back under the drop boards or in the corners.

Clean, dry litter with an occasional forkful of clover means busy, contented hens and good egg production.

Fish Chowder.—2 cups potatoes (sliced), 1 cup onion (sliced), 1 cup fish. Cook separately potatoes, onion and fish. Combine. Season and reheat with white sauce.

The King's Uniforms.

The King is by no means a dandy, and prefers the well-cut lounge suit and soft hat in which he receives his intimates during his rare leisure at Sandringham. The numerous uniforms in which he has to appear on many State occasions are under the charge of the head valet, and are kept in special rooms at Buckingham Palace, with a duplicate set at Windsor. At the beginning of each week the valet receives a list of the King's engagements with the uniform (each has its special number) to be worn, as well as the time when it must be ready.

Bedtime Stories

The Crows' Signal.

All the woodland people had things to fear in the winter time and there were hunters who never tired of devising ways to catch them by means of traps or of shooting them when they least suspected it.

What were they to do?

Underneath some inviting leaves or fallen branches might be concealed some trap laid for the unsuspecting. In fact, many of the woodland people were caught every week. And then, when the hunters came to look at the traps they were always ready to take a shot at some passing bird.

What were they to do?

Father Duck called a meeting of all the woodland people who were in constant dread of hunters and great was his surprise at the many who came.

Even Mr. Beaver found time to run from his new home beside the beaver dam which he was building.

Johnnie Muskrat and several of the Woodchuck family came, too, as did Simon Rabbit, with his long ears, and David Crow, while last of all came mischievous Mister Jay Bird.

It was a grand mass-meeting.

This is what they decided to do:

They divided the woodland into sections, giving the large birds the duty of giving the warnings from the tree-tops whenever danger was near on land; the ducks and water people were to watch the river and the marshes.

The rabbits and squirrels had the task of watching carefully for the hidden traps and give warning as to their right location.

A system of signals was decided upon.

It was part "wig-wag" and part telegraphing by means of cries. Mr. Crow was to raise his wings twice and then once in quick succession at the first sign of danger, while the rabbits and squirrels were to give two long cries and a short one for the alarm.

The hunters were greatly disappointed that winter to find so many traps empty and so many birds in sight, but so few near enough for a shot.

What had happened?

Father Duck by spring had begun to think his trouble was over and to breathe easier—he almost forgot the danger signals.

One day he was started by the shrill screeching of David Crow. "The warning signal!" he exclaimed.

Running quickly to his wife he shouted: "There must be danger for us! Keep perfectly quiet and stay right here with the children. You must be ready to leave at a moment's notice. I will run and find out what the trouble may be."

And with that he disappeared. Presently he returned and said that the danger was past. David Crow's signal had saved their lives

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