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.

Spring Rye For Ontario.

Spring rye should prove a valuable grain for some sections of Ontario next spring. It has several advantages which recommend it as a bread grain.

United States Department of Agriculture Bulletin 894, produced by the Bureau of Plant Industry under the direction of Professor Wm. A. Taylor, has just come to our desk. It contains a volume of valuable, clearly-stated, practical information. May we quote a few of the high points:

1. "Rye will grow on some lands not adapted to wheat. Sandy, exposed, poor, poorly prepared or acid lands will usually yield better crops of rye than of wheat."

2. "Rye is not so badly injured by insects and diseases as wheat."

3. "Rye will endure more acid in the soil than wheat, and can therefore be used where wheat would require liming."

The author points out the great value of rye for bread making, rye for grain, as a feed, and rye as a cover crop, green manure and grazing crop. The bulletin naturally deals with fall-sown rye. However, in increasing areas in the northern part of the United States, decided success is being realized with the growth of spring-sown rye. Especially will there be a place for a considerable amount of spring-sown rye in 1918. It might be well to note that another bulletin, No. 756, produced by the same department, United States Department of Agriculture, deals with the culture of rye in the eastern half of the United States.

Speaking of time of seeding, it says:

"Spring rye may be sown as early as spring oats, or as soon as the soil become warm and dry enough to be worked. It is usually sown before either barley or wheat."

Of course, rye responds to a well-prepared seed-bed, the same as other small grains. The author recommends the use of 200 to 300 pounds per acre of fertilizer at the time the crop is sown. Under normal conditions, the use of fertilizer analyzing about 3-8-4 is recommended.

As a rule, spring rye does not yield as heavily as other spring grains. However, on experimental plots at Ontario Agricultural College the following results were obtained:

Spring Rye at Ontario Agric. College.
10 Years Average Yields.

Variety	Yield
Petkins	29 bus. per acre.
Common	25.6 bus. per acre.
Prolific Spring	25.6 bus. per acre.

Rye will undoubtedly be highly valuable as a bread grain in 1918.

The Sunday School

INTERNATIONAL LESSON JANUARY 13.

Lesson II. Jesus Begins His Work—Mark 1. 12-20. Golden Text, Mark 1. 17.

Verse 12. Straightway the Spirit driveth him forth into the wilderness—The inaugural glories are followed by the temptation. According to Matthew and Luke he is led of the Spirit. In Mark the Spirit driveth him forth. He was impelled by a powerful influence, by a divine impulse.

13. In the wilderness—The wild and barren locality already alluded to. Forty days—Evidently a round number occurring frequently in Scripture, such as Israel's forty years in the wilderness, Elijah's going forty days in the strength of food given him by the angel of Jehovah (1 Kings 19. 8). Moses was in the Mount forty days and forty nights (Exod. 24. 18). Tempted of Satan—The temptation occupies an initial place in the ministry of Jesus. Mark gives the briefest account. Matthew and Luke furnish details. The gist of the temptation is clearly stated by Matthew—"If thou be the Son of God." Take a short cut to the attainment of the Messiahship. Work miracles for your own advantage. By the manifestation of the divine power you possess come at once to Messiah's throne. Satan—In Matthew and Luke he is called "the devil," the accuser or slanderer, also in Hebrew, "Abaddon," and in Greek, "Apollyn," Destroyer. Mark uses the name "Satan," "Adversary," as in Job 2. 1, and in Zechariah 3. 1. We have here current Jewish ideas of the existence of a personal evil agent with his minions, who opposes God, and by temptation, persecution, deceit, and guilt, estranges men from God. It is to Milton and Dante that we owe much of the popular conception of the tempter. Was with the wild beasts—A vivid touch of Mark, to show the awfulness and terror of the wilderness.

14. John was delivered up—To prison, the fortress of Machaerus, built by Herod on the east shore of the Dead Sea, where John was beheaded. Came into Galilee—One of the four districts of Palestine in the time of Christ (Judea, Samaria, Galilee, Perea). The text indicates that he withdrew to Galilee because it was not safe to remain near the scene of John's labors. Preaching the gospel of God—Heralding the good news of the kingdom of God, according to some texts. The manner of Jesus' preaching is given in Luke 4. He thus begins his official ministry with preaching—a message of pure mercy which God had commissioned him to declare.

15. The time is fulfilled (or completed)—That nothing now stands in the way of ushering in the Messianic kingdom which God had purposed—nothing in the counsel of God, the state of Israel or the condition of the nations. God has his own philosophy of history, his great purposes are executed not prematurely, but when the time is ripened or completed. The kingdom of God is at hand—Has come near. The people were familiar with the conception "kingdom of God." It becomes now a characteristic term of the New Testament and a fundamental idea of the preaching of Jesus and the apostles. The idea of a kingdom of God has its roots in the Old Testament conception of the rule of Jehovah. It means the rule of God on earth, as the goal of the Gospel and the completion of the course of history. It comes to its climax in the New Testament in the book of Revelation, where "the kingdoms of this world are become the kingdom of our Lord and his Christ." Repent ye—He takes up John's message and makes it the first article in his preaching. Believe in the gospel—But he adds a positive element. Believe in the good news announcing that the kingdom of heaven is at hand. This is not Christian faith, but only a step toward it. Christian faith is trust in a person, Jesus Christ. Many who hailed the message failed to yield themselves to Christ. Jesus preached himself as the object of faith. Christian faith is not belief in something about Jesus, but our personal trust in Jesus himself.

16. The Sea of Galilee—In the Old Testament "The Sea of Chinnereth," Num. 34. 11. In the New Testament, "The Sea," "The Sea of Galilee," "The Lake," "The Lake of Gennesaret," "The Sea of Tiberias." He saw Simon and Andrew—To these brothers Christ's call comes first. Simon, a Greek form of a Hebrew name—Symeon (Acts 15. 14), later called Peter—hence, Simon Peter. Andrew is a Greek name. John tells us that Jesus had earlier met Simon and Andrew, but he now definitely calls them (John 1. 40, 42). Casting a net; for they were fishers—The three kinds of nets used by the Galilean fishermen to-day do not differ from those used in New Testament times: the cast net, so thrown as to spread out in circular form and dropped over the school of fish; the bag net, used from boats; and the dray net, weighted at bottom and with floats on top and drawn from the sea to the shore.

17. Come ye after me—The definite call to be his disciples. Fishers of men—The same idea occusrs when Jesus calls the brothers James and John, according to Luke (5. 10) after the miraculous draught of fishes, but with the added phrase "from henceforth thou shalt catch men;" literally, take men alive.

18. And straightway—There was something in Jesus which won from these simple-hearted fishermen instant and unhesitating obedience. They left their nets—Just as they were, not dreaming of the immortal significance of this act of unhesitating allegiance.

19. Going on a little further—Along the shore where doubtless other parties of fishermen were busy with their fishing traps. James the son of Zebedee, and John his brother—A second pair of brothers.

20. Straightway he called them—This was not an impromptu selection of hitherto unknown men, for he had previously seen them, but he now summons them to be his followers. They left their father, and went after him—Here was also an immediate response. No details are given, no hint of any discussion with their father; nothing save the prompt decision followed by action, leaving to father and his hired men the business of fishing. The call of Christ is supreme.

Comrades.

One day I was not very good—
I answered back—no nice child should.
Then in the corner on a chair
I had to sit; mother puts me there
Until I'm really sorry—then—
Perhaps I won't do so again.
The time was not half gone and yet
A something warm and soft and wet
Licked one hand hanging at my side—
Dear Fido's tongue! And then I cried.
He nudged up close, the darling pup.
Soon mother called: "The time is up!"
I must be careful what I do
If Fido dear is punished too.

—Mattie Lee Hausgen.

A good dusting power is made from 35 parts powdered alum, 18 parts zinc oxide, 1 part boric acid, 1 part phenol, and 1 part camphor gum.

FIRST AID IN THE HOME

Besides a Cool Head We Need Right Remedies and Skill Using Them.

By Lillian M. Montanye.

It is an amazing fact that the home, where the child is supposed to be safest is usually the poorest equipped of all places to care for him in case of accident. A cut finger seems like a small thing and it is if it receives proper care. The mother is criminally negligent if the cut becomes infected because she did not provide clean bandages and antiseptics. Her child may be permanently disabled or life itself be lost because she did not know what to do.

"When an accident happens, keep cool!" is a good rule but the coolest head and the steadiest hands must have two things to render them effective: quick exact knowledge of what to do and the materials at hand with which to do it.

Every home should have a first aid closet, kept sacred for that use only. Every member of the family should know where these remedies are, what they are and when and how to use them. There should be bandages, antiseptics, adhesive plasters and all the simple remedies that may be safely used. The stock must be kept complete and in perfect order, properly wrapped, corked, labeled.

First, if the accident is serious, call the doctor. Better one call too many than a lifetime to regret. The telephone number of the family doctor should be hung beside the telephone and the children should be taught to call the doctor in case of accident. If the doctor is far away or delayed, there is work to do while waiting for him. The very thought that the necessary articles are ready for use will steady the nerves and set the hands to work.

Poisoning: For vegetable drugs which produce sleep, give an emetic to rid the stomach of the poison. Good emetics are mustard and lukewarm water, or salt and water. Give large doses and repeat the dose until the patient vomits freely. Ipecac is the most effectual emetic both in cases of poisoning but also in whooping cough and sometimes croup. Do not give an emetic for caustic poisoning as vomiting may produce serious injury to an already damaged gullet or stomach. An antidote should be given. The two most common caustic poisons are carbolic acid and caustic lye. Alcohol is a solvent for carbolic acid and vinegar is given for lye poisoning. The antidote for iodine is dry starch.

Poisonous bites: For bee stings and bites of insects apply ammonia. To prevent the absorption of poison of snake, dog, cat or horse, encourage bleeding and bind the wound between the heart and the wound to prevent, as far as possible, the poison from flowing back into the general circulation. Burn the wound with ammonia after washing with hot water and soap. Send for the doctor with all haste but do your part of the work quickly as every minute counts.

Sprains: A sprained ankle or any sprained point should be put in an elevated position to remove all weight on it and cloths wrung from very cold water should be applied frequently. The patient should be kept very quiet as movement is not only exceedingly painful but likely to increase the injury.

Bruises: Apply very hot or very cold water to prevent pain and swelling. Arnica will relieve soreness.

Broken bones: When a bone is broken, one limb will look unnatural as compared with its mate. There will be great pain, aggravated by movement. Place the patient in a comfortable position, putting the injured limb in the same position as the sound one, carefully supporting it on each side of the break until the doctor comes. Keep the patient warm and treat for shock.

Something in the eye: Close the eye so the tears will accumulate. On no account rub or press with the hand. If the tears do not wash the foreign body away, turn the lid inside out over a toothpick or other smooth slender body so that the entire inner side can be seen. If the substance cannot be removed, protect the eye with gauze soaked in a solution of boric acid and warm water and take the patient to a doctor. A flax seed slipped under the lid is a simple expedient that sometimes brings relief. It works out again easily and painlessly and may bring the foreign body with it. An eye cup that can be filled with boric acid solution is excellent for washing an inflamed eye.

Burns: There are three types of burns—first, second and third degree. In first degrees burns, the skin is simply reddened and roughened. In second degree burns, the skin is broken; a third degree burn goes clear to the bone. Second and third degree burns require the attention of a physician. The first degree requires physician only when three-fourths of the surface of the skin is scorched. For first degree burns, paint with picric acid. Or apply clean cloths dipped in a saline solution (one teaspoonful salt to one pint boiled and cooled water). Never use white of egg, cream, flour, oil or any substances that has not been sterilized, on a burn. Do not exclude air.

For second and third degree burns, before the physician comes, sterilize with gasoline. Apply the cloths dipped in saline solution and keep the bandages thoroughly wet.

Keep burns sterile as you would a wound. Scars follow only when pus forms.

Do not attempt to remove clothing which sticks to a burn; cut it free and leave it until the doctor comes.

Shock: Shock accompanies all serious injuries and must receive quick and skillful treatment. Place the patient flat and loosen the clothing. Give half a teaspoonful of aromatic spirits of ammonia if the patient can swallow. If not, hold ammonia to the nostrils. Rub the limbs toward the heart to try to force the blood to the heart. Do this rubbing under a blanket as the patient must be kept warm. Fainting may be treated the same way except that the face may be sprinkled with cold water.

Wounds: An apparently harmless wound may become a highly dangerous one as every opening in the skin is an entrance place for the millions of germs that infest the air. The principle to be followed in treating a wound is to prevent germs from reaching the injury.

If the wound is shallow, paint it and the surrounding skin with tincture of iodine. Pick up a folded piece of clean gauze and place the side which you have not touched against the wound. Cover with a piece of cotton and put a bandage over all.

If the wound is deep, the bleeding must be stopped first of all. Blood from a vein comes with a steady flow. Blood coming from an artery is bright red and flows in spurts and jets. The quickest way to stop the flow of blood is by pressure, applied a little way from the wound. For bleeding from an artery, pressure must be made between the wound and the heart; for hemorrhage from a vein press on the side farthest from the heart. There should be a tourniquet in the first aid cabinet ready for instant use as the pressure from the thumb and finger can only be kept up for a short time. The tourniquet is a strong bandage that is applied loosely, a stick or rod slipped under and a twist or two made to render the bandage as tight as possible. This can be held in place till help arrives. Own a tourniquet if possible.

No stimulants should be given until the bleeding is stopped unless the patient becames very weak. Treat for shock. When the bleeding has been checked, dress the wound as if it were a shallow one.

No homemade bandage is a proper application for a wound. The only safe absolutely clean dressing is one that has been sterilized and kept sealed in an air-tight package up to the moment it is used. Sterile absorbent cotton, gauze and bandages should be on hand and kept in packages which keep them sterile. In treating a wound the injured place must not be touched by anything not clean in a surgical sense. Wash the hands thoroughly, do not touch them to the wound and do not handle any part of dressings that are to touch the wounded surface.

What the first aid closet should contain: A first aid handbook, list of antidotes for saustic poisons, gauze and muslin bandages, tourniquet to stop bleeding, adhesive plaster, absorbent cotton, olive oil, antiseptic, aromatic spirits of ammonia, tincture of iodine, ground mustard, picric acid solution, arnica, scissors, safety pins, eye cup, hot water bag, ice bag (a good homemade substitute is a dried hog or sheep bladder; or, stitch up an oil-cloth bag, use the ice in chunks, placing sawdust with it for absorption of moisture and to retard melting), flaxseed, boric acid crystals, antidotes for caustic poisons, gauze picric powder, gasoline (secured against any possible evaporation), alcohol, carbolized vaseline.

Every bottle in this first aid closet should be plainly labeled and the label should give adult doses and doses for children. Your druggist will give you these.

Go over the contents of the cabinet every few weeks to renew corks, keep the order of arrangement and supply needed stock. See to it that every member of the family knows as much as the housemother about the cabinet and its supplies.

Little children are sometimes the ones on whom falls the sudden responsibility of summoning first aid. It should be part of their regular home training to know how to telephone, whom to call, where remedies and emergency equipment are kept.

Why Not Every Day a Meatless Day?

Nobody would suffer. Everybody would be benefited.

Here are a few of the immediate benefits to be gained by discarding meat from the national bill of fare.

Trichinosis, tapeworm and other maladies derived from meat would disappear from mortality tables.

Disease of the heart and blood vessels, due to uric acid poisoning and autointoxication, would greatly diminish.

Bright's disease, cancer, skin disease and many nervous disorders would fall off in frequency.

Longevity would increase as the result of a return to a biologic bill of fare.

Meatless days are welcome. May they multiply and become a permanent Canadian institution.

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, 233 Woodbine Ave., Toronto.

Mother:—Here is a little piece by Burges Johnson that your five-year-old boy might act with a broomstick or hobbyhorse stick:

The Rider

We've rode a thousand miles or more,
My horse and I across the floor;
And when I've gone another mile
I'll maybe let him rest awhile.

My mother thinks this horse by far
The best of all the steeds there are;
For though I gallop all the day
I don't get very far away.

Here's another, called "Soap Bubbles," by the same author. He might have a bubble pipe and bowl of suds in his hands as he speaks:

If I knew magic and could do
Just anything I wanted to,
I'd blow a bubble strong and wide
Enough for me to get inside.

We'd sail far up into the blue
And when it burst and went away,
I'd visit, for a day or two,
The place where vanished bubbles play.

The Kitchen Soldier:—So you have caught and adopted the term which has recently come to life and is being spread like wildfire over the North American continent. It is true that hereafter some of the battles of the war will be won in the kitchen and evidently you want to contribute your share to victory. Here are some practical rules suggested by the Food Controller which you may be able to diffuse in your vicinity.

Do not eat bacon or ham unless you are engaged in extremely heavy manual work.

Do not eat meat in any form at more than one meal per day.

Do not eat both butter and jam with bread.

Do not eat candy which is made principally from cane sugar. There is an abundance of other delicious confections sweetened with honey, mollasses and dark syrups.

In place of a slice of bread, eat one extra potato every day.

Use less cream and more whole milk and cheese.

Eat oatmeal, barley and corn breakfast foods, and buckwheat cakes instead of wheat preparations.

Waste no milk; condensed milk is needed overseas.

Drink fewer sweet drinks and omit icing from cakes in order to save sugar.

Do not display the joint of meat on the table. It is an inducement to eat more than you need.

Curious:—But you are entirely mistaken in your assumption that prices are higher in Canada than in the United States and even in Britain. A comparison of Canadian and United States retail prices of certain food stuffs for October was made by the United States Food Administration. The United States price for round steak is 105 per cent. of the Canadian price. Pork chops and bacon are cheaper in Canada. The American price of good quality fresh fish is 127 per cent. of the Canadian price. Milk is 110 per cent. Bread is very much cheaper in Canada, the United States price being 1.47 times as much as that in the Dominion. Other food commodities on which the average Canadian retail price is lower than the average American retail price are—rice, canned tomatoes, canned peas, dry beans, prunes, tea and potatoes.

Miss Canada:—Yes, you can send all the candy and "smokes" you want to the boys at the front without a license. Have you any conception of what the Bureau of Licenses means? Since it was opened up in the Food Controller's office thousands of applications for licenses have been handled. The system is serving to control the food export trade of the United States and Canada in the interests of the Allies. The destination of every pound of foodstuffs is known and therefore, there can be no leakage to enemy sources. The license system is one of the most progressive measures ever effected in the fiscal policy of Canada.

The Dairy

Medicine Chest for Stock.

Every stockman should have a medicine chest sufficiently well supplied with instruments and drugs to meet emergencies. The chest can be made from any good box, and need not be expensive.

Some of the most necessary articles to be included in the chest are: Scissors, knife, artery forceps, three or four thermometers, metal dose syringe, gun for giving physic balls, gallon can with hose attachment for giving injections, hoof knife, nippers, hoof hook, hypodermic syringe, rasp, bandages, absorbent cotton, and needles and thread.

The chest should also contain some simple remedies. A good antiseptic is necessary. A coal-tar product makes a good antisepetic, and should be used in a two to five per cent. solution. Potassium permanganate—one teaspoonful to two gallons of water—is recommended for a milder antiseptic.

Linseed oil is a good physic, but physic balls are more convenient to give, and safer. Epsom salts may be used for cattle but not for horses. In case a quick physic is desired the hypodermic syringe is used and an injection of one grain of arecoline is given.

Two liniments are recommended for the chest. One mild liniment is made from 1 ounce of turpentine, 1 ounce of strong ammonia, 48 grains of camphor gum, 1 to 2 ounces of iodine, and enough alcohol to make a pint of the mixture. A strong liniment is made from 2 ounces of camphor, 2 ounces of turpentine, 4 ounces of iodine, 16 grains of bichloride of mercury, and 8 ounces of alcohol. If this is rubbed it will cause blister.

If a blister is desired, use 2 ounces of cerate cantharides and 1 dram of bichloride of mercury, or 1 part of cantharides and 8 parts lard.

For treating distemper, first give a tonic, then steam the respiratory tract which creosote vapor. This is done by covering a candy bucket with a grain sack in such a manner that the horse's head can be covered with it. Then nearly fill the bucket with hot water to which has been added one tablespoonful of creosote. If any abscesses form, these must be opened and drained, but great care must be taken not to cut an artery. If a swelling does not come to a head, apply a linseed-meal poultice.

For pink eye, first give a tonic and then wash the eyes daily with a saturated solution of boric acid. This is made by adding five cents' worth of boric acid to a quart of water and allowing the boric acid to settle after shaking the mixture thoroughly. Only the clear solution should be used.

Mutton tallow, carefully rendered, may be used instead of paraffin.

Poultry

It has long been a custom to say that pullets should not be bred from, but a leading utility breeder said recently that he rarely hatched from anything but pullets, and that they always bred better layers than did the the hens.

A well-known poultry writer in England also confirms this principle that it is better to breed from pullets than from hens. He applies the same principle to stock breeding, preferring two-year-old heifers and three-year-old mares.

It has been objected to for various reasons, but one in particular is that in breeding from young birds it is impossible to get at their records as layers, but an experienced man who follows this custom says he knows what their mothers have done.

It is also an old-established idea that pullets are not reliable sitters, but this is not a serious factor. They may require a little more handling for a day or two, but that is generally all there is in it.

Still, old ideas die hard. There are many unreasoning people in the world who prefer to follow a lead rather than make one themselves, and even though they go on perpetuating an error for years they will not depart from it because, forsooth, everyone else they know does the same thing. It is useful sometimes to look around and study methods in other countries, and get in touch with men noted for their enterprise and progress. One can learn more in five minutes from such people than from following in the old rut adopted by others and clung to for years.

Ravenous appetite, accompanied by an excessive desire for water, is the first symptom of moderate infection of tapeworm in hens.

All the advantages which meatless days secure during war time may in time of peace be utilized to advance the best ideals and interests of civilization, while lessening its evils and handicaps under which we now suffer.

In the home proper heating and ventilation are essential in reducing the spread of infection with pneumonia. The office, the workshop and the bedroom should always receive a constant supply of outside air in order to carry away the infectious agents which are present in the atmosphere as the result of coughing and sneezing.

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