Farm Crop Queries

Henry G. Bell.

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.

Question—W. E. A.:—Have a piece of land I do not wish to work this season except to summer fallow. Can I plow it about June to kill weeds, and sow it to oats or anything else good for pasture? By not pasturing it too close and turning it under in the fall, will land be in good shape for next year?

Answer:—If you intend to summer fallow the land, I would advise you to plow it sooner than June, probably early in May, and keep it harrowed and disked about once in two or three weeks, so as to root up the young sprouting weeds and to preserve a dust mulch which will prevent the escape of the water from the soil. If you wish to establish a temporary pasture I cannot advise you better than to try the mixture advised by Prof. Zavitz of Ontario Agricultural College. He advises sowing 88 lbs. per acre of a mixture composed of 51 lbs. of oats, 30 lbs. of Early Amber sugar cane and 7 lbs. of common red clover. Professor Zavitz says to sow this early in May. The oats and the Early Amber sugar cane can be drilled in through the regular grain drill and the clover seed through the grass and clover seeder attachment of the grain drill. At Guelph this mixture has been found to be ready to carry cattle late in June. This pasture has carried more than one steer to the acre and in 1911 was successfully used to maintain milk cows. If this material is not pastured down too close it will form a valuable addition of humus to the soil if turned down late in the fall. Land under such management as outlined should be in good shape for next spring, if plowed fairly deeply in the fall.

Question—M. C.:—Kindly tell me how I can get rid of thistles and quack grass.

Answer:—The killing of thistles and quack grass requires heroic methods. Plenty of muscle, horse flesh or gasoline used through a tractor will kill them. The top of the plant serves much the same purpose as the lungs of animals, so that if the plant is deprived of that vital part it must soon die. If this principle is kept in mind both thistles and quack grass can be killed.

No one method will work in all soils, and in all locations. If the thistles are cut down and not a single spear allowed to come above the surface, they must soon die from lack of power to breath in air and ability to digest food. Usually some form of clean cultivation is the best method either with a crop or by bare fallowing. The thing to do is to outline a systematic plan of attack and to keep in mind at all times the fact that you must keep every leaf cut off.

The same persistent methods apply to the killing of quack grass. However, if the quack grass is in sod it is best to plow the ground shallow during the summer, say about three inches deep. For this it is advisable to use a special type of plow with a Scotch bottom having a real long gradually sloping mold board. This permits the easily turning of the sod. The next thing to do is, within a week or ten days, go on the land with a disc and thoroughly cut up the land. You should disc this every ten days or two weeks until fall when the quack grass will be completely killed out. Don't count the number of times you go over the land. Keep on going, going, going until every spear of the grass is killed out.

Question—J. G.:—What is the comparative food value of oats cut while green and cured and fed in the winter as hay, especially as a milk producer?

Answer:—The following is the analysis of oats cut in the milk stage:

Oats cut in milk stage and fed as hay in winter.

	Water	Ash	Crude Protein	Carbo Hydrates	N. Free extract	Fat.
Oats in Milk	14.0	5.7	8.9	27.4	41.2	2.8
Oats, the Grain	10.4	3.2	11.4	10.8	59.4	4.8

It is seen from the above analysis that oats cut in the green stage make a very good feed for all classes of livestock. They should not be fed alone to milk cows but supplemented with alfalfa hay and concentrates in the form of bran, cottonseed or oil meal. The chances are that better results will be secured and perhaps a larger quantity of food can be harvested if the oats instead of being sown alone are seeded with Canada field peas.

Question—A. S. L.:—I am thinking of planting a few acres in strawberries for the market. What is the best soil, fertilizer, and variety of plant and the best time to begin? A detailed answer will oblige.

Answer:—Strawberries are not overly particular as regards the soil in which they grow; however, they will usually do best on soil that is suitable for potatoes. They should be grown in a rich, friable seedbed well supplied with humus in order that there may be a reasonably good supply of moisture held in the soil. Strawberries are not very hard on the soil. A ton of strawberries is worth say $200 and only takes from the soil about 85 cents worth of plantfood, yet because their growing season is so short, the soil must be well supplied with available plantfood. This is best done by getting the ground ready a year ahead of time. Pick out the place where you expect to plant the strawberries and cultivate it to a hoed crop covering the ground before this crop is put in with anywhere from 20 to 40 loads of manure to the acre. Absolutely clean cultivation is necessary in order to free the land of weeds. If manure is available that is well decayed and free of weed seeds, ten to twelve tons to the acre may be applied before planting the berries and re-enforced with from 1,000 to 2,000 pounds of commercial fertilizer to the acre. A good fertilizer for strawberries should analyze about 2 to 3 percent. ammonia, 8 to 12 percent. phosphoric acid and 4 to 6 percent. potash, if it can be purchased. This analysis is suitable for a good sandy loam soil. If the ground is extra thin and manure is not available a little more ammonia should be used in the fertilizer and more pounds to the acre applied.

The ground should be plowed late in the fall if possible and allowed to lie over the winter and preferably plowed again early in the spring and thoroughly worked down to prepare a fine, firm seed bed and to eradicate all the weeds possible.

In the choice of varieties, the soil, climate and market must be considered. Varieties, that under certain conditions of soil, climate and market, may prove profitable, may under changed conditions prove worthless. In selecting varieties the beginner should be guided more by the advice of progressive growers in his community than by what catalogs say. If his land is early he may find profitable plants from the early varieties such as Crescent, Barton's Eclipse, Senator Dunlap, Warfield, and Beder Wood. If his land is late he will find it more profitable to plant some of the later varieties such as Sample, William Belt, Commonwealth and Brandywine. Just as soon as the planting is finished cultivation should begin. The first two or three cultivations should be rather deep so as to remellow the soil trodden down in planting. All later cultivations should be shallow. The land should be cultivated at least every ten days and after each rain.

If you will write and get the Annual Report of the Secretary for Agriculture, Halifax, Nova Scotia, for the year 1910, you will find therein two splendid articles on strawberry culture that go quite a good deal into detail regarding best methods of handling this crop.

May Flowers.

The people talk of windy March
And of the April showers.
And how these two are sure to bring
The welcome Maytime flowers.

But I am sure that both these months
Are failures as to weather,
For every year they seem to get
Most sadly mixed together.

There's rain in March and April wind;
The snowstorms get all twisted,
Which makes it clear that Maytime flowers
Come forth quite unassisted.

Use Fertilizers Freely.

It costs time, labor or money to plough or spade up a garden and to get the best return for the labor or expense it is absolutely necessary to purchase seeds of the very best quality. These can be had from seedsmen with established reputations. To sow cheap seeds or seeds of doubtful quality is to invite failure.

After the seeds begin to grow labor must be expended in cultivating and keeping the weeds down.

It is very gratifying after a season's hard work to harvest a large crop of flowers or vegetables of superior quality and contemplate how well the work has paid.

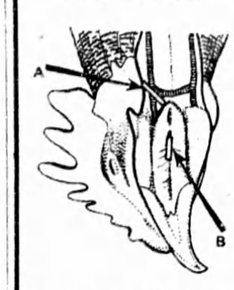
The starting point of success is first to get the soil well pulverized and as deeply as possible; second, to sow good seeds; third, to use fertilizers liberally. Using fertilizer is similar to depositing money in a savings bank. All the original deposit or investment is returned and the liberal use of fertilizers pays many times better interest than any savings bank. It is folly to try to make good gardens without the liberal use of fertilizers and the hoe or some similar implement.

PREPARING POULTRY FOR MARKET

It Pays in Dollars and Cents To Add The Finishing Touches To Produce Intended For Table Use.

(By F. G. Elford, Dominion Poultry Husbandman.)

HOW TO KILL



From the original drawing by Dr. A. B. Wickware.

The illustration represents the roof of the bird's mouth and the veins, the lower jaw being removed. The mark across the vein on the left side of the bird's neck (A) is the place to cut to bleed. The mark in the roof of the mouth (B) indicates the place to enter the blade to strike the brain.

Putting the finishing touches on a product before offering it for sale yields the greatest proportionate return of any labor done on the average farm. This lack of "finish" is nowhere so clearly seen as in our poultry products as shipped to market.

To prove that producers do not put the care they should on their poultry products before offering them for sale, one may visit any market and he will find that a large proportion of the poultry exposed for sale exhibits a carelessness that no other business could stand. Good farmers who follow a systematic crop rotation, who conserve all the available moisture in the soil, who never market a bullock except in a finished condition, seem to forget all their business principles when poultry is being disposed of, and think only of getting rid of them in the quickest and easiest way possible.

There are comparatively few exclusive poultry plants, and experience in Canada, as a rule, has not been encouraging to that system. But farmers could make considerably more revenue from poultry if they would take even ordinary care in the preparation.

Preparation—Its Value.

The time it takes to prepare produce before it is shipped from the farm is time well spent. No matter what is being sold, it should never be sent from the farm until it is in the best possible condition. Especially is this true when produce is intended for table use.

Well-finished broilers or roasters cost less per pound to the producer than those that are poorly fleshed, and they are much more palatable to the consumer. Though he may have to pay from 25 to 50 per cent. more per pound for such, as a rule the edible portion really costs less.

The Old System of Marketing Dressed Poultry—Its Defects.

Possibly nine-tenths of all the dressed poultry produced has found its way to market through what is sometimes called "the system," the outstanding feature of which has been the lack of system. The peddler or country store was the first handier; there was no encouragement to be careful, for the same price was paid for all, good and bad. In some cases the producer broke away from the system and shipped direct to the dealer but did not prepare his birds as he should. In many cases the birds were bought by a middleman on a commission basis, and too often the quality was not good and there was absolutely no grading. This system, or rather lack of system, in selling meant, and still means, a lower net return to the shipper, because of lack of uniformity, poorer quality and numerous commissions.

Fortunately such producers are becoming fewer every year, but they have been responsible to a large extent for the condition in which produce arrived on the market and for the state in which it has been exposed for sale, even in some of our larger cities.

On one of these markets visited by the writer there was hardly a bird young or old that could not, by a very little attention, have been improved, at least in appearance. Chickens were there in dirty crates, chickens of all colors and sizes. There were old hens that were lousy, hens with scaly legs and some that looked as if they might die before the axe came. There was not one live bird in the lot that one could relish on the table after seeing it as it was. Nor were the dressed birds much better. They lacked that neatness and finish that makes one wish he were carving one for his dinner. Many were thin and those that were fairly well fleshed were poorly plucked. The skin was torn or blotched from scalding, some were bled, some had lost their heads, and some had thir necks dislocated.

If all the dressed poultry that goes into the market was of an appetizing appearance and of good quality, the producer would get a better price, and the consumer would be willing to pay for something he could enjoy eating. It is a good object lesson for the producer to see what his produce looks like just before it goes into the consumer's hands. If he saw it, he would sometimes wonder how it brings as big a price as it does.

Warm weather and long hauls, coupled with rough handling in transit all have a share in depreciating the quality, but it must be borne in mind that produce never arrives on the market in better shape than it leaves the shipper.

Why intelligent farmers will persist in selling their poultry in anything but the best of condition is hard to explain. Possibly present-day conditions could not help but create a carelessness that has left the trade in its present state.

There is, however, no reason for letting it remain there. The careful producer should get a higher price for his good quality products than does his neighbor who cares nothing about how his are produced or where they are marketed.

Inferior Produce—Who Loses Thereby?

There is less reason every year why producers should put up with this state of affairs. By more care in production, through co-operation or direct communication with better markets, better prices may be received by the producer and more satisfaction given to the consumer, but the first step is for the producer to produce a higher and more uniform quality, for all producers, whether their product is good or bad, lose on any bad produce that goes on to the market.

The producer loses on this because the dealer loses on the poor quality and he cannot pay as much for the good, for on it he has to make good his loss on the poor; the bad produce has already cost for transportation which comes out of the producer; these poor quality birds are retailed and the producer again loses by the decreased consumption. Not a package of dressed poultry is offered for sale but either helps or hurts the selling.

It is quite probable that many a chicken dinner has been changed to beef because of the way these products are exposed for sale and the producer is first responsible for this and is the heaviest loser.

Inferior Produce—Who is to Blame?

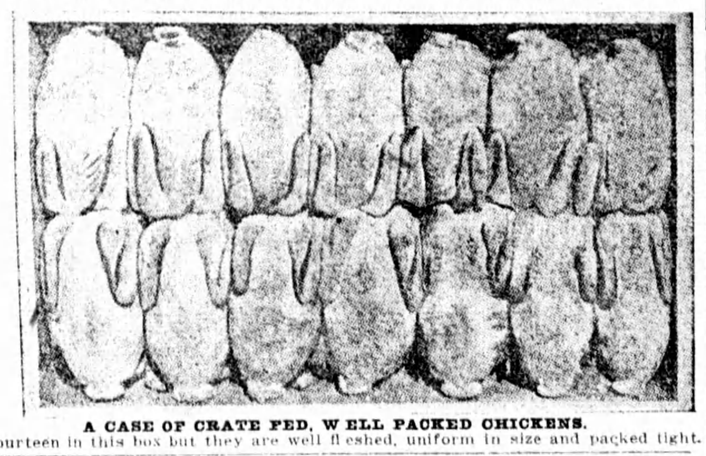
Though it has been pointed out that the producer might improve his product and his methods of selling, it must not be imagined that he alone is guilty. Each person who handles the product even to the consumer is sometimes at fault. Though it is possible to improve the quality delivered by the producer, it too often happens that stuff that is good when it leaves the farm is spoiled before it is eaten.

It might therefore be noted that all, from the producer to the consumer, are more or less to blame for the condition of the poultry market and every link of the chain should be strengthened, though the wholesaler and the producer are the two most important. However, as it is the producer that we are writing this information for, it is his responsibility that we are emphasizing.

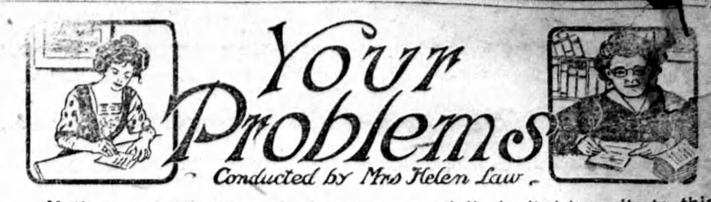
The Improved System—Its Methods and Advantages.

Thanks to demonstrational work and to co-operation among the producers, better business methods are being adopted. Conditions in some sections are greatly improved but the work has only started and this improvement must become more general if producers are to get the returns they ought. The demand for good stuff is steadily increasing and with it the price. Fifteen years ago farmers occasionally sold poultry for 6 to 8 cents a pound. Now dressed poultry sells for 12 to 20 cents a pound and in some cases much higher. There seem to be few industries that promise brighter prospects to the farmer than poultry managed on a business basis.

In some sections farmers are co-operating, thus putting on the market a more uniform product in better condition and at less expense; more care is being taken in the production and finishing, and consumers are discriminating more in the quality they purchase. Some of the middlemen's commissions are being eliminated and the producer and the consumer are coming closer together.



A CASE OF CRATE FED, WELL PACKED CHICKENS.
Fourteen in this box but they are well fleshed, uniform in size and packed tight.



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.

M. M.:—1. For a home wedding the bridal party should enter the room in the following manner: The clergyman leads, followed by the bridegroom and best man. When he reaches the place before which the bride and bridegroom are to stand for the ceremony he turns and faces the people and the bridegroom and the best man stands at his left hand, also facing the guests. When they have taken their places the bridesmaid enters the room, followed by the bride, who rests her arm on the left arm of her father. As she advances and reaches the place where the bridegroom stands he steps forward and offers her his left arm. Her father steps to one side and the bridesmaid steps to the side of the bride, while the best man remains beside the bridegroom. All five now face the clergyman, who performs the ceremony. After the father has given his daughter in marriage, which he does by a simple nod of acquiescence when the clergyman asks who gives her in marriage, he steps back and joins his wife, who is standing near. After the clergyman has given the blessing he steps to one side and the bride and bridegroom turn and face the guests, the best man and bridesmaid taking their places, one on each side of the newly married pair. The family and friends then advance to offer their congratulations and after all have spoken to the bride and bridegroom the wedding breakfast is served, after which the happy pair, if in wedding clothes, change for travelling costumes and depart amid a shower of friendly confetti and old shoes. 2. Displaying the presents is entirely a matter of personal taste. Some persons do not care to do so, but it has come to be considered quite the thing, and it is very pleasant for the guests to see them, when they have been well arranged. It is in perfectly good form, therefore, and is expected at most weddings. 3. The bride should acknowledge each present herself. If the donors are kind enough to think of you, you should be gracious enough to acknowledge them yourself.

INTERNATIONAL LESSON MAY 13.

Lesson VII.—Jesus The True Vine—John 15. 1-16. Golden Text—John 15. 5.

Verse 1. We have another instance here of John's habit of compressing parables by fusing the parable and the interpretation. Matthew would have omitted the references in these two verses to the Father and the Son, and added the exposition at the end. True vine—The adjective "true," or "real," becomes here practically "ideal"—that which alone answers to all the thoughts the eye of Jesus sees in the parable.

2. In me—This parable may possibly be the starting point of the highly concentrated phrase "in Christ," repeated in varying forms some seventy times in Paul's letters, and constituting the very kernel of his theology. Cleanseth—Not by pruning, which is in the first clause: it is a washing that is meant.

3. Clean, as in the Greek, recalls cleanseth in verse 2. The teaching which Jesus has given them throughout their discipleship has achieved its purpose for those eleven men: see John 13. 11. It has purged the branches from blight and parasites, and prepared them for more abundant productiveness, which is their only reason for existence.

4. And I in you—Just so Paul is always setting by his great formula "in Christ" the complementary "Christ in me." It was no figure of speech, or pious phrase: for him the Master was literally living his human life over again within his soul. And nothing less will ever give real life to any of us. Except ye abide—"There is this mysterious property in the branches of the spiritual vine, that they can cut themselves off, as Judas had done. Nature does something, and grace does more; but grace may be rejected" (The Cambridge Bible).

5. The vine—The whole vine, including the branches. Paul has the thought with another figure when he calls the church the body of Christ, each Christian being a limb or organ of it. Do nothing—The verb is that of Matt. 3. 8, and quite possibly we should render "produce nothing," keeping up the figure.

6. This is the parable of John the Baptist (Matt. 3. 10). "A metaphorical description of the fate which awaits an unfaithful disciple. He is like a useless branch which is broken off and thrown away, and after it gets withered and dry is consumed as firewood."

7. Observe how this illuminates prayer, which is not mere petition, but a vital harmony with God. Such union with God in Christ will make it impossible to ask what is out of accord with the Will, except in the spirit of Jesus in Gethsemane. If a man thus blessed does ask something that God does not will, it shall be done unto him still, in that something better will come. Compare Paul's experience, 2 Cor. 12. 9.

8. Is . . . glorified—The tense of the Greek is a little difficult. Probably it means "has been this moment glorified," or received. The time of fruit-bearing is seen so vividly by the Master (compare John 4. 35) that it is spoken of as already present. Even in actual time, Pentecost was very near. The above interpretation of the tense is supported by the fact that it is used in John 13. 31, 32, where also the Lord speaks of his object as attained. And be my disciples (margin)—A disciple who does not bear fruit is not entitled to the name.

9. Hath loved . . have loved—Read loved: as throughout John 17, the Lord is speaking of his earthly life as lying in the past. Abide ye—This implies "even so must ye love me": his love for them must act and react. My love—"Primarily, the love which I have shown, and, in a secondary sense, the love which I inspire. So with his love in verse 10" (The New Century Bible).

10. Note how the idea of love as a mere emotion is put away: it is always and everywhere a productive power. 'To keep his commandments not only proves our love for him, but secures his love for us" (The Cambridge Bible). See especially Paul's description of its energies in 1 Cor. 13.

11. My joy—Which was his already even before he "endured the cross" (Heb. 12. 2). They are invited to "enter into the joy of their Lord." The words presume that they have enough of it already to long for more: to see a redeemed world has become a supreme ambition with them.

12. This takes up John 13. 34; its repetition recalls the story of John in his extreme age, carried into the church and never saying anything but, "little children, love one another." The family love of the disciples of Christ is God's new way of teaching the hitherto unattainable command, "Thou shalt love thy neighbor as thyself": compare 2 Pet. 1. 7.

13. This great verse sweetens bereavement for multitudes of us in the horror of this war. "In thus citing his own love as a model for their imitation, he intimates . . . . that he is about to give the highest possible proof of his love by laying down his life for them" (The New Century Bible) No man . . . a man—It is safer to render no one . . . one—the word man is not there.

14. Friends—So does James (2. 23) connect Abraham's great name "the friend of God" with his doing God's command.

15. Here again the case of Abraham comes in. "Shall I hide from Abraham that which I am doing?" says Jehovah (Gen. 18. 17). Even so here the Divine Friendship is marked by Christ's taking them into confidence. That he would no longer call them 'bondsmen" did not prevent them from claiming that title as a glory; thus James 1. 1, Phil. 1. 1, etc. Compare the phrase in a fine old prayer, cui servire regnare est, "whose slaves are kings."

The Foolish Hen.

"Please give me a piece of your bread," said the cat to the old hen that was trying her best to eat a loaf of bread that was almost as big as she was. It was far more than she needed for herself.

The old hen only ruffled up her feathers and clucked something that could not be understood, so the poor, hungry cat had to go without.

"Please give me a piece of your bread," grunted the little pig. But the old hen only ruffled up her feathers, took her big loaf and turned off to one side where she thought she would not be bothered.

"Please give me a piece of your bread," said the pigeon, as it flew down from the fence right by her side. The old hen was getting very angry by this time. She flew at the pigeon, and scared the little thing out of the yard.

"Please give me a piece of your bread," said a big, old dog. The old hen only ruffled up her feathers, as usual, and started at the big dog; but he did not mind that. "If you will not give me a piece, I will take it all," he said, as he started toward the big loaf.

The old hen seized the loaf of bread in her mouth and started on a run, but the dog could outrun her. She saw that she would have to do something quick, so she spread her wings and tried to fly over the fence. But just as she got to the top of the fence a little bird pecked at the loaf; and away it went tumbling back to the ground; and in her fright, instead of landing on the fence, she fell right into a barrel of water close by.

The old hen called the cat to help her, she called the dog to help her, and she even pleaded, "O little bird, please help me! I am about to drown."

They all worked as hard as they could to get her out, but they could not. Just as the poor old hen was about to sink to the bottom of the barrel of water, Farmer Perkins happened along and took her out, almost dead.

The cat, the pig, the pigeon, the dog and the little bird all had a good feast off the old hen's loaf, and it was a long time before she was able to eat another crumb of bread.