

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. S.—I have three or four acres of corn stubble, good ground, which I want to sow to buckwheat this season. I would like to know how it would do to sow sweet clover with it. Which would grow the fastest? We sow buckwheat here in June as soon after planting as possible. Would there be a chance to get buckwheat or would the clover wheat beat it out? Would it make good fodder?

Answer—You could sow sweet clover with buckwheat but I am afraid the result would not be satisfactory. The buckwheat makes very rapid growth and would in all probability smother the clover. You would do much better if you would sow the sweet clover in oats or barley. I do not believe the mixture of sweet clover and buckwheat would make satisfactory fodder because both are very coarse in straw, especially the buckwheat. Sweet clover must be cut early if you are going to use it for hay, otherwise it would get very woody.

A. L.—What means can I take to rid my farm of English sparrows?

Answer—I do not know any practical method of ridding a farm of English sparrows. Cutting down brushwood which surrounds the fields will destroy their nesting places. As a rule they cling pretty closely to barn yards and groves. Crop the ground nearer the barn and woodlots or groves to fodder crops or corn, potatoes and so forth, crops on which the sparrows do not live.

W. G. S.—We are gardening on

twenty acres here, and, of course, we haven't enough manure to cover it. Would it be wise to spread lime on the ground? It is black sand loam. Or would lime and manure do any harm to land? We have a carbide lighting system in the house. Is that stuff good for the land? It's very watery when we charge the plant.

Answer—You could spread lime on your garden ground and use it to good effect for most crops. However, this will not add to the plantfood of the soil. Lime corrects sourness but does not add to the plantfood. Do not mix lime with manure when you are applying it. The lime from the carbide lighting system should be fairly good. Spread it evenly over the ground and work it in. If you are short of manure get a bag of fertilizer analyzing 4-8-4. This is a fairly rich garden fertilizer and should give you good results.

A. F.—Can you tell me which is the most profitable hay to sow on light sandy loam? Could you tell me whether Hungarian hay will give a good crop and how to prepare the soil for it? I heard some farmers say the Hungarian hay is similar to alfalfa in harvesting. How many times can it be cut in one season?

Answer—For light sandy loam soil few crops can beat alfalfa. This produces splendid hay and if you can get it well started it will stand for a number of seasons. Hungarian grass is an annual type of millet which makes fairly good hay but you can only cut one crop from it. It certainly is not to be compared with alfalfa.

Some Do's and Don'ts in Setting Fruit Trees.

Don't put manure in the holes when setting trees. Orchardists have given manure a thorough trial and condemn it. If you do use manure, place it on top of the ground around the tree, but be sure to scrape it away before fall. It makes fine mouse nests if you leave it near the tree.

Don't crowd the roots or curve them around the hole. It is far better to cut them off if they are too long.

Don't leave air spaces under the roots; air is fatal to the root growth. Don't allow the trees to lie in the sun while you are digging holes. Dip the roots in water or, better still, in a pail or tub filled with thick muddy water.

If you can possibly spare them, put a few potatoes under each tree around the roots. The rotting potatoes furnish moisture and some plant food. If they grow, let them, but do not attempt to dig the potatoes.

Don't forget to cut back the branches to a length of not over six inches. Cut off all side branches of the peach trees. Do the pruning after you are through setting. Leave the trees a little in the direction of prevailing winds.

Don't put sub-soil around the roots. Save the top soil and put it in the bottom around the roots.

Don't set out dwarf trees in a commercial orchard. They are for the city lot or garden. Don't set out standard trees on the city lot. Dwarf trees take up but little room and bear young.

Don't buy trees just because they are cheap. A cheap tree is a mighty dear tree. Deal only with reputable nurseries.

Don't buy pictures, buy trees. The standard varieties need no fancy pictures.

Don't let the high price of nursery stock prevent you from setting out some trees. A year from now your money will be gone and you will not have the trees.

Don't let your age prevent you from setting out an orchard. You are never too old to set trees. Father set apple trees when he was past sixty and lived to eat many an apple from them.

Spray for Aphids.

As the days grow warmer and the buds begin to swell, the apple aphids hatch out and cluster on the buds where they begin feeding on the tender green tissues. At this time the insects are more susceptible to spray application than at any other, especially as later on the foliage offers the aphids some protection. An application of three-fourths of a pint of nicotine sulphate to every one hundred gallons of spray mixture will give satisfactory control, provided a very thorough application is made.

Practical experience in the control of these insects indicates that it is advisable to do all the spraying from the ground, rather than to stand on the rig while application is being made. By standing on the ground, one can thoroughly cover the lower branches and twigs, and in general do a better job than when the work is done from the top of the tank.

Drain your soil or your soil will drain you.

Preparation for Spraying.

Those who have been accustomed to spray thoroughly for the control of insects and diseases each year will need no reminder of the importance of having everything in readiness to begin at the right time this year. Those who have sprayed irregularly in the past, or who have not sprayed at all, should be warned that insects and diseases take their toll every year. Some years, and in some places, certain kinds are more troublesome than others, but the only way to be reasonably sure of having clean and uninjured fruit is to be prepared in good time for the fight. If one has a pump which was not thoroughly cleaned and left in good working order last autumn, this should be overhauled before growth begins this spring. If left until it is time to make the first spray, which is often the most important one, the critical time might have come and passed before new and necessary parts of the sprayer are received and before the pump is in working condition. If the first spray is not given at the right time, it will be exceedingly difficult, if not impossible to have clean fruit this year. The tent caterpillar promises to be bad in some parts of Canada, and this is easiest controlled when the first spray is given for apple scab.

Spray calendars, giving the proper mixtures to use and the times of application for the same, can be obtained free of charge from any of the Provincial Departments of Agriculture, or from the Publications Branch, Dominion Department of Agriculture, Ottawa, Ont.

The time for the first spraying arrives just after the leaf buds have broken. If "a stitch in time saves nine," then, certainly a spray in time often saves the situation.—W. T. Macoun, Dominion Horticulturist.

Being Kitchen Slavey.

About three years ago the good wife was sick in bed for two weeks and I was the kitchen slave.

Say, I tell you, I got so tired of lugging water, filling and cleaning lamps, wearing off my knuckles on the washboard, that I said to myself, "never again."

I had to have an engine to run my cream separator, so I got a kerosene one at \$100. A belt-driven washing machine cost me \$41. That paid for itself in twenty washdays.

I had soft water in the bathroom, but no hard water. I bought a tank from a junk pile for \$2 and piped the water from the windmill to it.

I laid an iron sink, \$1, on the floor of the back room and a short piece of hose connected to the washing machine carried off the water. This ran near the roots of my raspberry plants and in the dry weather was a blessing to them.

I had the house wired. I bought a second-hand generator for \$50, batteries for \$65, and now have electric lights in the house, hen house, barn and hog pen. Incidentally, a contented wife.—R. L. Beckwith.

A strong social spirit can be maintained in a community only when each member of that community contributes his part to its social activities.

Fertilizers for Gardens.

Fertilizers give great results in the garden. No garden is so rich that a careful use of the right fertilizers will not make better vegetables and more of them. I have seen gardens so rich in nitrogen that all kinds of plants made a rank growth, but many failed to produce good crops because of a lack of other soil elements. Wood ashes, ground phosphate rock, and ground bone are the common natural fertilizers for balancing where manure or green crops are used freely. Lime is not a fertilizer but is valuable to sweeten the soil and give the plants a chance to get the plant food in an available form.

Garden soils will be sure to get sour if kept manured for this tends to make them sour, and a soil to do its best should be more or less alkaline. Potash is not often needed, but phosphorus is commonly deficient, and bone-meal is one of the best fertilizers to use for phosphorus, as it is very rich in it, and also contains much lime and some nitrogen.

The best way to use bonemeal is to spread a narrow strip of it out a little from the row on each side and stir it into the soil. Barely cover the soil of these two or three-inch strips with a dusting of the bonemeal as a heavy application is not needed and more may be given later if it is thought best. It is perfectly safe and becomes available slowly, so lasts for a long time. One application is enough for quick-growing plants, but crops growing all summer will be benefited by a second. A light sprinkling of nitrate of soda when planting starts the plants off quickly as it is ready to use at once before much soil nitrogen becomes available.

The Sunday School Lesson

APRIL 15.

Joseph, the Preserver of His People. Lesson Passage: Gen. 30: 22-24; 37: 2 to 50; 26. Golden Text—Honour thy father and thy mother; that thy days may be long in the land which the Lord thy God giveth thee.—Exod. 20: 12.

LESSON FOREWORD—Among the patriarchs Joseph stands perhaps only second to Abraham as regards the level of high moral personality. In today's lesson we may observe two of his outstanding traits. First, there is his magnanimous forgiveness. All the more remarkable does his forgiveness appear when viewed against the moral background of his own generation. His was an age which, on the whole, believed in retaliation, rather than forgiveness. "An eye for an eye and a tooth for a tooth" was its usual practice. Second, his conception of providence, in which he unites the petitions and fortunes of men with God's directing and controlling hand. To recognize that God makes even the sins of men serve his purposes without thereby lessening their moral responsibility was the solid achievement of Joseph's faith.

I. A Noble Forgiveness, 3-8.

V. 3. This touching scene took place in Joseph's house—perhaps in the audience chamber. (See ch. 44:14.) Judah has been interceding passionately for Benjamin (44: 18-34) and Joseph could no longer restrain his pent-up feelings. I am Joseph. There is a sublime simplicity in this brief disclosure. In Hebrew there are but two words—"I" and "Joseph." They were troubled; conscience-stricken that the brother whom they had sought to kill should be the powerful ruler.

V. 5. Be not grieved. Joseph uttered not a word of anger or revenge. He sought to soothe his brothers' troubled consciences. God did send me. He recognized a providential purpose in his life. His brothers, in selling him into Egypt had been the unconscious instruments of God.

V. 6. The famine. In Palestine famines were frequent because the fertility of the soil is almost entirely dependent upon the rainfall. In Egypt, however, not only is there remarkable fertility but, as Warren says, it is not directly dependent on rainfall, the annual flooding of the river Nile inundating nearly the whole land and making the cultivation of the soil, as a general rule, a yearly certainty. Sometimes, though rarely, the Nile failed to overflow and a famine ensued. One of the Ptolemies had to import grain from Syria and Phoenicia because of a famine in Egypt. Sowing; plowing. See Isa. 30: 24. The oxen and the young asses that eat the ground.

V. 7. To preserve you a posterity; leave you descendants. Had it not been for Joseph's timely aid, the whole house of Jacob might have perished with famine.

V. 8. A father to Pharaoh. This was perhaps an official title of the chief administrator under the king. Joseph had become a sort of vizier in Pharaoh's court. Aliens of capacity and fidelity were sometimes elevated to the most responsible positions in the state by Eastern monarchs.

II. A Bountiful Provision, 9-15.

V. 9. Haste ye. Joseph bade them haste because he longed to see his father and because, if they delayed, his father might meanwhile perish through the famine.

V. 10. The land of Goshen. Goshen, one of the names of lower Egypt, comprised the territory lying to the east of the Nile delta. Situated on the frontiers of the desert, it was frequently invaded by hungry nomads. It was an excellent pasture region, and since Jacob and his family were shepherds and not agriculturists, it would admirably suit their tastes and pursuits.

V. 11. There will I nourish thee. A Hebrew slave rising to the highest position in Egypt, drawing his family after him, and supporting them with public property entrusted to his care, may be paralleled with similar instances. Jews who rose to high offices

The Dairy

Dairy cows to produce profitably and economically, must consume their feed regularly and in such amounts as to encourage them to build up strong assimilative systems. Loss of appetite is commonly the result of feeding too large a ration, unclean grain, or moldy roughage, or feeding a too narrow ration without a change of feed. Among dairy cows, loss of appetite is a serious matter as it lessens production and impairs the working capacity of the animals.

My experience has proven to me that some cows are more susceptible to loss of appetite than others. Cows of this type should be gradually eliminated from the herd. However, the dairyman should learn to recognize the approach of this trouble and be continuously on the alert to avoid such conditions that would likely cause it. It is a great deal easier and more profitable to avert loss of appetite among members of the herd than to correct the trouble after it once occurs.

The ration should have as much variety as possible. Change of feed stimulates appetite and encourages the cows to increase production. Clean sweet roughage and grain should be fed and nothing else. I find that wheat bran in the ration is a wonderful appetite stimulant and keeps the digestive system in active working condition. I like to change my roughage feed as often as possible. Salt is essential and should be kept constantly before the cows, either in the yard or stable.

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It has been proposed to make a paper horseshoe that shall for general purposes be the equal of the steel article in the following way: Parchment paper is cut in horseshoe form and built up to a suitable thickness by the use of a mixture of turpentine, Spanish white shellac and linseed oil treated with litharge and the whole is placed under an hydraulic press. This produces very light and uniform pieces and it is an easy matter to stamp out the nail holes and grooves. Instead of nailing to the horse's hoof they can be applied with an adhesive composition whose principal part is a solution of rubber in bisulphide of carbon. Paper waste could also be moulded into the shape of a horseshoe by use of the press, but the result is not so good as with the above.



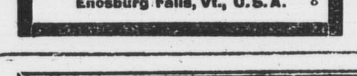
An Undersize Threat.
Mrs. Fish—"Get out, you horrid tramp or I'll set the dog-fish on you!"

Community pride is valuable when it is directed toward the advancement of its members and the improvement of the neighborhood.

Ignorance is an enemy which the farmer should hunt with increasing persistence.

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Nature will soon appear in her spring clothes. As Nature's dress-maker, the farmer should use every effort, for his own interest, to see that her clothes are not too scanty.

Wax for Phonographs.

The carnauba, or wax palm, has many commercial uses, but its chief value is its production of wax for making phonograph records. The best quality comes from the tenderest leaves. They are cut at three different periods during the wax season, which extends from September to March. It takes about two thousand leaves to make twenty-five to thirty pounds of wax. The leaves are dried in the sun and when thoroughly withered are beaten with hammers to remove the wax. The raw product is melted in boiling water and strained to remove foreign matter.

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