

Soils and Crops

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MR. JONES VISITS HIS WHEAT FIELD.

Wheat is more generally fertilized in Ontario than any other farm crop. Most farmers are of the opinion that it pays better to fertilize wheat than the other crops of the rotation. Aside from the matter of profit, which must come from either increased yield, better quality, or both, there are a number of questions that arise in the mind of Mr. Jones as he walked across his wheat field.

Within certain limits, it makes little difference how many pecks of wheat are seeded per acre. The number of heads developing per square yard of ground is not so much dependent on the number of seeds planted as the ability of the soil to produce strong vigorous plants. For example, eight or nine pecks per acre of seed do not commonly produce a larger crop than do six pecks, although there may be more plants. In the case of the lighter seeding, the plants stool more until about the same number of heads are produced. The fertility of the soil apparently governs the stooling of wheat. Fertilizers promote a heavier root growth, and greater stooling with less winter killing. The quick start which fertilized wheat is able to make in the spring insures an easier maturity, and, often, escape from destructive rusts and drought.

Fooling The Hessian Fly.

The Hessian fly is one of the worst of wheat pests, and yet it is fairly easy to control, if the habits of the insect are understood. In order to reproduce and cause destruction, the adult fly must lay its eggs on young wheat in the early fall. Apparently the wheat plant alone suits this purpose. The eggs develop into larvae which go down into the base of the young wheat plants and destroy them. To avoid the fly, wheat must be seeded late enough to escape the egg-laying season of the fly. Delayed seeding is more hazardous from the standpoint of winter-killing. Careful preparation of the seed-bed, and plenty of available plant food in the soil overcome the handicap of a late seeding and the fly is avoided.

A Big Help in Growing Clover.

A common complaint is that it is harder to grow clover than it used to be thirty or forty years ago. This is undoubtedly true. When the land was first cleared, clover grew easily, abundantly, and luxuriously. But on our Ontario soils, crop after crop was removed without replenishing the plant-food supply of the soil. Furthermore, lime was rapidly removed from the soil by leaching as well as by the crops. Sour soils developed, on which clover does not succeed. Satisfying this need for lime is often the first requirement in successful clover growing. But there are also soils where clover fails because of phosphorus hunger. On such soils a fertilizer containing this plant-food will make a better stand of clover, larger plants that are not so easily heated out by frosts, and a consequent greater yield of hay.

Fertilizing for the Whole Rotation.

The effects of fertilizer on wheat in a rotation are by no means confined to the wheat crop. The influence may extend over several years, especially if clover follows wheat. The increased clover crop is often very striking. The larger tops and root systems when plowed under have an accumulative effect on the corn, potatoes, or whatever crop follows. The question

Control of Production.

The marketing of farm products is made difficult largely because of the uncertainty in the size of each of our many crops from year to year. Were it possible to reduce to a nicety the amount of corn, wheat, apples, potatoes and other crops grown, then some of the problems of distribution would not be as formidable as at present.

To think that such a control over the production of agricultural crops could be had would be the height of folly. There are too many factors over which man has nothing to say. The amount of rain, frosts, sunshine, etc., are all given to the just and unjust in such varying quantities and times from year to year, and their influence on production is so great that it becomes impossible to reckon accurately how crops will turn out until they are actually harvested.

But any approach toward uniformity would aid in marketing, and it

Farming Versus Agriculture

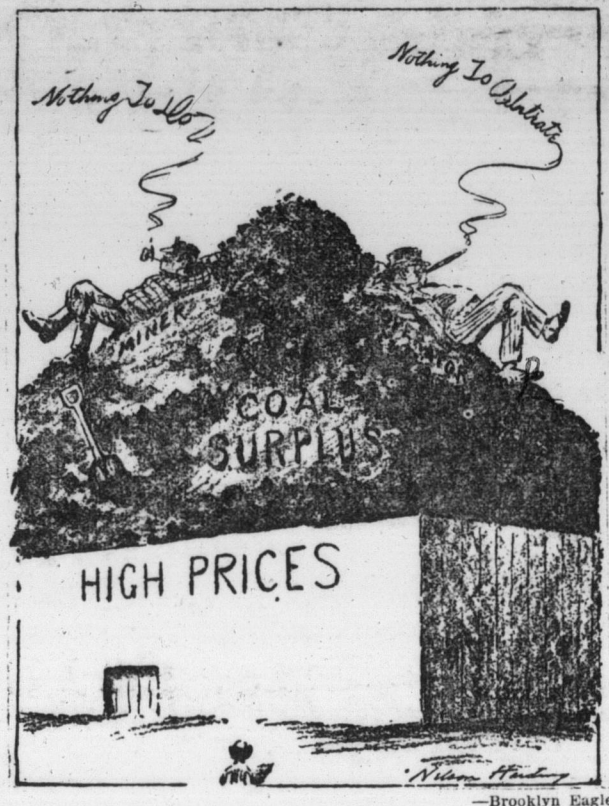
In former years, when men essayed Good Mother Earth to tickle, It was not counted as a "trade" To wield the scythe and sickle. To steer a plow and drive a nag And, with the feet loam-weighted, Plod back and forth behind a "drag" As "Hoppin' clods," was rated.

He counted brawn ahead of brain, The doughty son of Labor Who daily toiled through sun and rain, As likewise did his neighbor. He blindly fought the worms and flies Which yearly were alarming, And, though he took the county prize, His toil was classed as "farming."

But, in these days of modern tools And more progressive seeding, We learn our precepts in the schools, And through constructive reading. A good farm paper fills the need, And is a potent factor In raising crops from fertile seed, As much so as the tractor.

Where formerly we cast aside All scientific data, It now affords us joy and pride To raise a smooth potato. So, raising live stock, corn and peas, In spite of pest and vulture, Is a "profession," if you please, And classed as "agriculture."

A LAY OFF



My Lot and Yours

By Bertha Lee Smith

In the bustling city, where I had gone for the day, I was taking a short cut through a side street. The hot waffle man had guided his old horse up to the curb, and the children were thronging around him, some with pennies, some apparently just with appetites, all drawn by the tinkle of the bell and the tantalizing odor of the waffles. Two small boys eagerly grasped the waffles their coins had purchased. The larger one swallowed his tid-bit in one all-satisfying gulp, but the little fellow with the auburn curls slowly nibbled around the crusty edge of the hot delicacy, prolonging the pleasure. Noticing the eyes of the other waffle-eater fixed on him, he paused and asked:

"Was your's good?"

"Huh, lots better'n your'n," retorted the other, strutting off toward the corner with never a backward glance. This incident remained with me all afternoon, and even while I passed away the time on the return trip by glancing over some farm papers I had purchased at the news-stand. The papers seemed to be filled with advice to farm women. Now, really, I don't mind advice; it interests me; it is often instructive, sometimes helpful, and I like to give it myself. But after that day in the hot city some of it just put my disposition on the bias. Especially so with one article that pointed out that the farm women (statistics quoted) was backward in the use of modern implements, improvident in supplying the table with nourishing food, and untaught in sanitary methods of living.

It seems to me that the press has always used the conditions of farm life for "fillers." When some space must be filled, they talk about farm women! First the press laughed at us, then it pitied us, and stated in exact numbers the percentage of us who ended our lives in insane asylums. Our dreary lives were bemoaned, our bedraggled skirts pointed out, our galoshes giggled over (until the city flapper began to flop around in them as we never did), and our idioms of speech were noted. Now I will confess that this public expression is veering, nor to worst, and efficiency is the slogan hurled at us.

True, we all have the most nourishing foods at hand, but the majority of us do use them; good, clean, raw milk with home-made yeast bread satisfies hunger better, and with much less trouble, than fancy desserts or sauces with a milk foundation that are so much written about and advocated. Crisp radishes pulled while the dew is still on the leaves are palatable at our noon-day dinner, without being cut into imitation roses to garnish some other dish. The same paper that advises us to centralize all kitchen furniture so that steps may be saved, will then go on and describe and illustrate the making of intricate desserts, colorful entrees, and camouflaged vegetables. Perhaps the brain-weary city worker does require some temptation to eat, but the best way to deal with a farm family appetite is to have enough to go around twice.

After arranging everything so that all walking in the kitchen is done in a straight line, no matter if a curve might lead us to the wonderful sight of blooming holly-hocks under the window, the water-system is the next point of attack. The drudgery of pumping and lifting and carrying is pointed out. On one of your trips to a nearby city just take time to visit some gymnasium; there you will find many city housewives busy "exercising" to reduce weight. Watch these exercises closely, and what do you see? Lifting, carrying, arm exercises similar to pumping, why, yes, there they all are.

Now, I do want the cistern water piped into the kitchen, and when one can afford it, I think there should be water on both floors, the water to be connected with the water-heater, the bathtub and the sewage system, but no expert can convince me that I should draw the drinking water from a faucet. I prefer to get it directly from the deep, drilled well.

I'll grant that the farm women do work long hours, and many endure what would be real hardships to a city-bred woman, with a kitchenette education, but think of the satisfaction in living that is gained! Things sprout into being under our touch, we have all around us the results of our handiwork—green lawns, flaunting perennials, sturdy vegetable rows down the garden, the waving tresses of the north woodlot in the background, and the all-satisfying odor of well-filled bins and cribs and mows.

I do take more steps around my big farm kitchen with its tables and sinks, its cabinets and cupboards, its range and oil-stove, the rocking-chair by the window with the magazine rack at hand, than any city housekeeper could possibly take from her perch on a high stool which gives her command of the whole working equipment. But I don't have to go to "exercise" to keep fit. Farm work accomplishes something worth while and the farm wife gets her physical culture away from the polished "gym" floor. I don't suppose that I could touch the floor ten times with the tips of my fingers without bending my knees, but I can pick up a basket of chips from the woodpile without sitting down to it.

Now that I have unburdened myself somewhat, I will grant many things to the newspaper articles. I believe in efficiency in work and in living. Farm life is a true partnership of all the members of the family. It can be made a happy and paying one. I am glad that improvements in working conditions are being advocated and being made. Reading and music can take one out of the every-day slump of mind, and can now be had and enjoyed by any farm family, thanks to the rural mail carrier, the phonographs, and the radio.

Then when snow and cold come, take your annual vacation. Just take it, whether you can afford it or not. Go to some city, visit friends or relatives and do some sight-seeing, or attend some farmers' convention, take one of the short courses in an agricultural school, take anything, but be sure to take something. Get out. Crowd in all the plays, lectures and concerts that time will permit. Eat at hotels and restaurants, and mingle with people, for farm life is in a way a solitary one. When, tired out, you are at home again with the round of familiar duties you will find that you have gained enough of a mental stimulus to last you through the year.

I can not get the viewpoint of those women who hate farm life, and I spent some twelve years living among the cave-dweller occupants of the modern city office building. I had to work eight hours a day, and spent the remainder of my waking hours in trying to keep body and clothes in condition for another day. A theatre, a concert, or a restaurant dinner was as much of a red-letter occurrence then as it is now when I live on the farm. Personally, I prefer the farm and its hard work to any office work. I wish that every woman who hates the farm might be able to work in a city for a while. Then if she still hated the farm, heaven and earth should be moved to keep her away from it.

Use every efficiency device known to mankind to lighten your labor, if

SMOKE

in 1/2 lb. tins and 15¢ pkts.

OLD CHUM

The Tobacco of Quality

you want to and can afford it; but let me pump a tin-cupful of water, clear and sparkling, from the well, while my eyes linger on the surf of a rippling field of wheat, coning up against the breakwater of the wire fence, and like the small boy I will say to any city worker: "Lots better'n your'n."

Culling Improves Progeny.

Hens that are born loafers usually begin by July to quit their job of egg laying and start moulting, taking most of the summer and fall to finish the replacement of old feathers with a new coat of plumage. This is one of the outstanding characteristics of the unprofitable hen, and the poultryman who keeps close watch of his flock may use it to his advantage in culling out the undesirable birds. But this is not the only dependable indication of what may be expected of the hens in a flock.

There are several things that the wide-awake poultryman looks for at this season. The low producer, having small demand for the yellow coloring matter manufactured by her body, puts it into her legs and beak, making them a rich yellow. The busy hen uses the color in touching up the yolks of eggs and her legs and beak become pale. These birds with pale legs and beaks may not look so well or so healthy as the others, but they are the ones it pays to keep. In fact, the hen that is most beautiful in summer and fall should always be under suspicion.

On closer examination it will be found that the loafer has a scaly and shrunken comb, while the busy hen will have a plump comb of a bright red color. The hen that has stopped

laying will have her pelvic bones considerably contracted and the distance between the bones of the pelvic arch and the lower end of the keel will be materially reduced. She should be an early candidate for the kettle.

The heavy layer will show no signs of moulting at this season, although she may have been producing since last fall, but will stick to business until late fall, sometimes rounding out a full year of continuous egg production. This year-round laying not only means more eggs, but also that a higher price is received for them as a large proportion of them are laid in winter, late summer and fall when prices are up. The early moulter lays most of her eggs during the flush season. The hen that can keep up production under the comparatively unfavorable conditions that obtain outside of the natural breeding season has outstanding vigor and stamina.

The wise poultryman will lose no time in culling out these poor producers of cheap eggs. He will start this summer building the foundation for a flock of long-distance layers. The birds can be selected now and next spring, after a short rest in the winter, their eggs will produce a high percentage of strong, healthy chicks that are almost certain to make better records in flock production. If good sires are selected the improvement will be surprisingly rapid.

New buildings costing \$1,500,000 will be opened by the Canadian National Exhibition this year, including the Coliseum and the Pure Food building.

Presume not upon your friendships.

Parents as Educators

Cultivating a Child's Sense of Humor

BY EDITH LOCHRIDGE REID.

We are all familiar with the old saying that a sense of humor is a saving grace, but even though we adults, mothers and teachers, appreciate this trait, too often we neglect the opportunity to encourage it in the child. All children love a joke. Even very young children are quick to catch a pun or a play on words. They are always ready for a good laugh, and they are all the happier if some one will enjoy the laugh with them.

Fortunate indeed is the child who has a teacher who indulges a sense of humor in both herself and her children. And if these same pupils receive further encouragement at home through mother, they develop a clean through mother, they develop a clean wit which is a joy even while they are small. The children who daily play under my window make remarks that are clever enough for any writer to use in his daily newspaper department, but I am not surprised at their remarks when I know the teacher who has them in charge at least four hours each day. She is always bubbling with mirth and never allows the tiresome details of routine to dull her perspective. She never loses a chance to turn a word or a phrase at the proper moment so that the children catch the humor. And they grow to like this game of matching wits with the keenly alert mind of the joking teacher.

I visited that teacher's room one day and the class was writing a composition on "Mother." Ruth raised her hand and asked, "How do you spell 'awful'?" Miss Allen looked at her a moment in surprise and then said, "Why Ruth, you don't mean you're using that word in a talk about 'Mother'?" Ruth's eyes danced and a broad smile broke over her face as she replied, "I just asked that on purpose to see you look surprised. I know how to spell that word and I'm saying my mother does awful nice things for

me." The idea was that the child planned to use that word (this is not the place to discuss the propriety of its use) and when she saw the opportunity for a joke, she felt at liberty to share her discovery with the teacher because there was that certainty of appreciation which Miss Allen had encouraged.

Yesterday that same crowd of children to which I have previously referred was exploring the mysteries of a new house in process of construction. The carpenters had laid the shingles around the top of the roof in bunches just as they came from the lumber yards, and Dorothy had never happened to see shingles in that shape before. So she said carelessly, "I didn't know shingles came that way," and Bobbie, catching the remark quick as a wink, shouted "How did you think they came, in paste board boxes wrapped in pink tissue paper?" Now Bobbie goes to school to Miss Allen, and in addition he comes from a family who, although very modestly endowed financially, have a wonderful faculty of getting fun out of life. They can construct a gloriously happy home on the very foundation of adversity, simply because they mix in that wonderful saving grace, a sense of humor.

Aside from teaching the children this happy trait, it is a most helpful factor in adding zest to the daily tasks of the teacher. A good laugh is a splendid nerve tonic, as any physician will testify, and the tension of everlastingly-keeping-at-it can be relieved many times during the day by the well-developed habit of roaming off for a moment into "lighter vein." Some children as well as adults are more richly endowed by nature than others with this characteristic of humor, but it is wonderful what cultivation of even the tiniest germ will produce even in the soberest and seemingly dullest individual.

Poultry

The proper housing of chickens is essential. Do not keep more chickens than you have room to care for properly. Allow four square feet of floor space for the American or English breeds and three square feet for smaller breeds as Leghorns. If overcrowded, it will mean disease and loss. Ventilation must be so arranged that there will be no draft on chickens. We are advised for every ten feet of floor space to have one foot of opening in the front part of the house that should face either south or southeast. One-half of this should be glass and the other half covered with muslin. Every house should have a system of ventilation whereby the greatest number of birds that it will hold will receive the benefit of the fresh air. Do not keep too many chickens in your house for that will lower the vitality of the birds and make them susceptible to disease.

Having had my flock culled, I know that it is very important and feel that it has been a factor in making a profit. The undesirable birds, such as the loafers, the ones that are not laying enough eggs to pay for their feed, the old ones, the diseased and also the less vigorous ones, must be taken from the flock before you will be ready to get results from the feed given. Do not think because the hen has the capacity to produce a large number of eggs in a year that she will do so without any attention.

In these days of scientific feeding of stock, we hear much about balanced rations and the extra profit by such feeding. I may well say the feed for Biddy is just as important. A friend remarked to me, "a hen does not lay because she wants to but because she has to lay." This expresses the truth clearly. Give the well-housed, vigorous hen proper food, and a full egg basket is the reward.

We keep a dry mash before the chickens the year round. This is fed in self-feeders which the handy man can easily make. We use the grain we raised on the farm. For dry mash we use:

100 pounds ground corn
200 pounds ground oats
100 pounds meat scrap.
In addition to the mash, scratch grain is fed in litter, oats in morning and corn in evening, during the cold weather. For summer months the corn is omitted. Through the winter I feed green food to give variety. I use vegetables and feed six or eight quarts to one hundred hens each day. I plan to have green food that is most easily raised. Pumpkins are the main green food as long as they keep, which is usually until the first of February. In feeding pumpkins cut them in halves, remove the seed and the hens will do the rest. Cabbage, sugar beets and potatoes help to make variety and are used in this way. In early spring when vegetables are gone I sprout oats. This is excellent feed and much relished but owing to the extra work I omit the sprouted oats as long as I can.

Propagating Currants.

The usual method of propagating currants is by means of cuttings. The best time to make the cuttings is in the autumn, says the Dominion Horticulturist in his bulletin, The Cultivation of Bush-Fruits, as currants begin to grow very early in the spring, and once the buds have swollen they cannot be rooted successfully. Wood of the current season's growth is used, which may be cut early in the autumn as soon as the wood has ripened. The cuttings are made by cutting the wood into pieces about eight or ten inches long. The base of the cutting should be made with a square cut below the last bud, allowing at least half an inch of wood above the top bud. If the cuttings are not planted at once, but are heeled in, they should be tied in bundles and buried upside down in warm, well-drained soil with about three inches of soil over them. They can be kept in good condition over winter by burying in the sand in a cool cellar, or they may be left outside, after caulousing, if covered with from four to five more inches of soil to prevent their drying out.

Fertilizing the Garden.

A knowledge of the nature and use of manures and fertilizers is very necessary to every gardener, whether he be amateur or professional. A decided aid in this direction will be found in Exhibition Circular 104, issued by the Horticultural division of the Dominion Experimental Farms. It furnished information on potting soils and their enrichment, on liquid fertilizers, and on special fertilizers for flowers, fruits, garden crops and lawns. It is hardly necessary to say that knowledge of this kind will materially aid in efforts to make the home surroundings attractive, and in the production of those fruits and vegetables which, particularly when fresh from one's own garden, are so enjoyable and inviting.

Sanitary Hen's Nest Made of Metal.

The old-fashioned dirty hen nest seems to be doomed to extinction by a metal nest, which can be secured periodically. A false bottom is another feature of then est. It consists of a metal frame with holes, through which the eggs roll out of sight. This prevents the hen from sitting on the eggs, eating them, or getting them dirty.