

Soils and Crops

Address communications to Agronomist, 73 Adelaide St. West, Toronto

EARLY STRAWBERRIES.

Question—York County, Ont.—I am growing strawberries for the Toronto market but find the Glen Mary a little too late in ripening to catch the early market. Please advise me of earlier kinds; also tell me what is a good green manure to plow down after the strawberries are plowed up in preparation for re-planting?

Answer by the Dominion Horticulturist—There are two or three varieties which are somewhat earlier with us than the Glen Mary. Perhaps the earliest is the Excelsior, an old variety which is poor in quality, but a very good yielder. Among the fairly early varieties is Maggie, and still another is Beder Wood, the latter being fairly well known and perhaps as good in quality as any.

If the strawberry patch could not be plowed under by the middle of July, it would be difficult to get a cover crop of sufficient quantity to be of much service. On the Experimental Farm at Ottawa we sow rape about the 6th or 7th of July and get a fairly good stand, plowing it under the following spring. Hubam clover might be worth a trial as it is a fast grower and as it is an annual does not carry with it the danger of becoming a weed.

FORCING VEGETABLE CROPS.

Question—I should like to get some information on forcing cucumbers, tomatoes, peppers, cabbage, and squash. I succeed in raising the plants but not in getting rapid growth, especially the cucumbers.

Answer by the Dominion Horticulturist—The failure to get rapid growth would indicate a lack of available plant food at the proper time. Such crops as cucumbers, peppers and squash require a soil that will warm up quickly and respond to cultivation by yielding up the plant food rapidly. It would be well to apply nitrate of soda at the rate of 300 pounds per acre. If this is not done until after planting scatter a small amount of the nitrate of soda along each row of plants and cultivate it into the soil. A similar quantity of 16 per cent. superphosphate applied with the nitrate of soda would also help development of the fruit, especially the peppers, squash and cucumbers. Treatment for the growing of these crops is found in pamphlets distributed by the Publications Branch of the Department of Agriculture at Ottawa.

FEEDING THE WEANING FOAL.

The most important period of a

horse's life is the time from weaning until the foal is a year old. The amount and quality of feed fed during this period will largely determine his future development. Many potential draft horses are so checked and stunted in growth from a lack of proper feed and care as colts that they never attain the size which would raise them from a low-priced, nondescript chunk into a high-priced, profitable drafter.

The first step is to get it feeding regularly on grain before weaning it from the mare. A mixture of oats and bran are the best feeds to use for this purpose. When the foal is feeding regularly it may be weaned without danger of a severe check in growth which will always occur if weaned without being taught to feed first. If two foals can be put together in a roomy loose-box they will fret less than if kept by themselves.

The best feeds to use are oats—preferably rolled, bran, a little linseed meal and good clean, well-cured alfalfa hay. The concentrates are readily procurable anywhere but the alfalfa will not be available over as wide a range. It is, however, more valuable than any other roughage and horse breeders would be well advised to make a special effort to grow enough of this feed for their foals and also the brood mares, if possible. Other good quality hays rank next to alfalfa in value as roughage and good results can also be obtained from them.

Feed should be given three times a day at as nearly as possible regular intervals and the foals should be watered before feeding. The foal is easily taught to drink before feeding and once the habit is formed no further trouble will be experienced. Salt should be available at all times. A small block of rock salt in the corner of the manger is the most satisfactory method of supplying it.

The amounts of feed necessary will vary with different animals. A foal will very seldom eat more than it can properly assimilate, differing in this point from older horses. Reasonably generous feeding will be amply repaid in the extra growth and development. Good sound thirteen-hundred-pound horses flood the market at low prices; while well-built, sound horses of seventeen hundred pounds, or over, are readily saleable in the same districts at from one hundred and eighty dollars upward in price.

Regular exercise each day is just as important as plenty of good feed and should be regarded as part of the feeding operations for, without exercise, the feed would not be utilized properly.

Harvesting the Winter Stump Crop

By Gaston Farmer

Said a neighbor to me the other day, "I have been plowing and cultivating the big crop of stumps on my place for five years now, and I can't see that they are improving at all—so I'm going to harvest them. I have bought dynamite and a blasting machine and am going to blow them out, as you did last year."

Previous to this, the same neighbor had asked about the effectiveness and cost of stump blasting and I gladly gave him my experience.

First, he wanted to know if stump blowing is expensive. I told him "Yes. Any method of getting rid of stumps will cost something. Still more expensive, however, is the method of waiting for them to rot and thus prohibiting the use of improved machinery for years and years—machinery which would pay for itself and the cost of stumping many times over."

FIRING WITH FUSES. There are two general methods of blowing stumps with dynamite at the present time. One is by firing the charge with fuse, and the other by an electric firing machine.

The first method is most generally used at present and gives the best results when shooting tap-rooted pine stumps, where one charge of dynamite is placed in an auger hole in the centre of the main root. Where these conditions are found, the fuse method of blasting is very satisfactory and economical, as it cuts off the tap-root below the plow line and splits the stump into easily handled pieces.

It has the disadvantage of labor and time required to bore the hole into the root from twelve to thirty-six inches, according to the size of the stump. A satisfactory method of boring such holes by machinery has not been devised for the average farmer.

Still another method of loading for fuse shooting is to bore a hole down by the tap-root and place the charge outside the root. This works satisfactorily on small stumps, but on large ones it is not effective, because only one charge can be fired at a time. The usual effect of such a shot is to blow the dirt away, leaving the stump split, but intact. A second or third shot will then be necessary, and with the ground loose and the stump split, it is next to impossible to confine the charge so as to do a clean job.

The electric method consists of placing two or three charges around the stump and firing all at the same time with a blasting machine. The larger have air or they die.

the stump the more charges required, and the deeper the holes should be. This method is effective on all stumps regardless of size or kind, when properly loaded. It is slightly more expensive than fuse shooting, but is also less dangerous, more effective, and takes less time and labor.

With the inexperienced man, too much dynamite is wasted on account of improper loading—that is, not loaded deep enough or not sufficiently confined. For best results, the holes should seldom be less than four feet deep and should be completely closed with damp soil packed tight after the dynamite is placed. Loaded in this way, the explosion should make very little noise and the stump will not be thrown over the field. When there is a loud, sharp explosion, the force of the dynamite is being wasted; and when stumps fly all over the field, too much dynamite is being used.

HOW MUCH DOES IT COST?

Next, my neighbor wanted to know the cost of stump blowing. I told him that depended on the size, age, and kind of stump and the nature of the soil. Green stumps require more dynamite than old ones; lateral-rooted stumps more than tap-rooted ones. It also requires more dynamite to blow a stump in sandy soil than it will in clay soil.

Recently, I kept the exact cost of ridding a field of very large lightwood stumps. The average cost was ninety-two cents each. The estimated cost of digging them, made by myself, and other farmers, was \$1.50 to \$5 each.

Most pine stumps can be blown for less, and taking pine stumps as they come the cost will be between forty and sixty cents each. Taking all kinds of stumps as they come, the cost will be still lower.

The Windmill.

The windmill, spinning round and round,
Emits a dreary, snarling sound;
And so would you, perchance we'll say,
If you should spin around all day.

Potatoes must breathe, so they must with a blasting machine. The larger have air or they die.

DAIRY

Is a superior or inferior cow born or grown? Answering this common question has called for a great deal of investigation, and the matter is by no means settled as yet, but some of the information may prove of aid to the dairyman who is looking forward to getting a better foothold in the game, and who is not satisfied to just stand still. Feed is supposed to affect size, type and production, and though it would take a large book to cover all these points, a short article may contain the substance of the facts thus far learned by careful and well conceived investigation.

There is no doubt that a heifer fed a heavy grain ration will develop into a larger cow than one reared on roughage alone; but the difference in size is much more marked during the first few years and less so at maturity. Experiments show the height at the withers of an eighteen-months-old, heavy-fed heifer, to be 3.5 inches more than for the poorly fed one, while at maturity the difference was only one inch.

Liberal feeding may affect type temporarily in that heifers so fed will be heavier and show beefiness of form instead of the angular conformation looked for in the good dairy cow. If, however, the heifer has inherited from her parents the factor of heavy milk production she will usually "milk off" this additional fat during her first lactation period and ultimately develop into as good a producer as her more scantily-fed mate.

Under certain conditions, such as preparing pure-bred stock for sale or exhibition, or when it is desirable to increase size somewhat, it might pay to feed very heavily on grain, and it must be said that there is no fear of injuring heifers in doing this, for if the cows are bred right they will lose the surplus fat soon after calving. But, in general, the most profitable course to follow will be an intermediate one, between the two extremes, on very good pasture, no concentrate, and at other times, all the clover hay they will consume, with ensilage and roots when available, and a grain allowance of from two to three pounds per animal, per day, according to age.

Canadian Lamb in Demand.

Canadian lamb has obtained such a reputation on the New York and Boston markets that it is now a specialty on the menu cards of some of the leading hotels in the big cities of the Eastern States. Mr. H. S. Arkell, Dominion Live Stock Commissioner, stated recently that the duty has made no marked difference as regards demand, as customers had shown a willingness

to pay the increased price asked. The Montreal market has established itself as one of the best lamb markets on the North American continent, and many of the best pure-bred rams that laid the foundation of this state of things were from Ontario. Information received by the Live Stock Branch shows that there is a wide-spread demand for high-class breeding rams in all parts of the country, due largely to the fact that Canadian lamb is now recognized as a high class and fashionable product. Mr. Arkell urges sheep breeders to do all they can to improve their stock, not only for the production of a tasty and popular meat, but as well in order to obtain a more favorable standing in the wool market. The Live Stock Commissioner believes that an optimistic outlook in both branches of the sheep industry is justified.

SHEEP

The ewe lambs should be separated from the older members of the flock and given special care. On account of being younger and timid the ewe lambs, if allowed to run with the ewe flock, will not receive the food they require and consequently fail to mature as rapidly as they should.

I find it a good practice to separate the ewe lambs in the fall and winter, and feed them liberally on muscle and bone-making food. Alfalfa or clover hay, bean pods and bright corn fodder are excellent roughages. Corn silage is a splendid source of succulence and can be fed safely if not too rich in grain.

Roughages alone should not be depended upon for developing the ewe lambs. I fed a light grain ration, consisting of equal parts of oats, corn and wheat bran in shallow troughs twice daily.—R.

Ontario's Greatest Grain Crop.

In 1923 oats were grown more extensively in Ontario than all other grains combined. It is probably safe to say that three-quarters of the oats which are now grown in this province are of the O.A.C. No. 72 and the Banner varieties. According to extensive experiments and accumulated records at the College at Guelph and in Western, Eastern and Northern Ontario, the O.A.C. No. 72 has surpassed the Banner in both quality of grain and yield of grain per acre. The difference between these two varieties, if applied to the oat lands of Ontario, would mean millions of dollars annually in favor of the O.A.C. No. 72.

Hay properly stored for a long period of time does not deteriorate to any marked degree in feeding value.

Farm Scales—A Good Investment

By R. B. Rushing

The average farmer has no idea how much he loses each year because he has not a pair of good, reliable scales on the farm.

If you feed a number of hogs you should have a pair of platform scales to weigh them when you commence to feed them, and then by weighing the grain that is fed them you should be able to tell whether you are feeding at a profit. When you are ready to deliver to the market it takes just a few minutes to weigh your wagon empty and again after the hogs are loaded, then you are able to tell where you are. Of course, you must allow a little for shrinkage. From my own experience I would say that fat hogs will shrink about two pounds apiece, hauling four miles.

Here in our neighborhood many of the hogs and cattle are sold to the buyers, who come and buy them at the farm, and unless there is a pair of scales the animals are generally lumped off. This is too uncertain. The buyers are buying all the time and are very likely to make a price that is more than safe for themselves. Besides there is not the satisfaction in the deal that there is when you can see them weighed on your own scales.

GUESSING THE WEIGHT OF HAY.

If you do not feed stock, you sell your hay and grain to feeders; you certainly do need a pair of scales. You can not afford to guess the weight of a load of hay. What you would lose in this way in a year would usually buy a pair of good scales, if you do much business. If you sell your corn to feeders you are liable to lose money by guessing off a crib of corn or by measuring it. This, as you plainly see, is not a safe way to do business.

The first year I had my scales I got enough more money on two deals to half pay for my scales. One deal was

on a load of wheat that fell short 500 pounds, and the other was wool; and still some will say that it does not pay to bother with weighing everything you sell. They are satisfied as long as they see the weighing done; but even this is not always safe.

I have in mind a pair of scales that can be thrown short 200 pounds right in front of your eyes and eleven men out of every dozen would not notice it. When I first purchased my scales, my neighbors thought I was just sinking that much money in the ground unnecessarily, but I have learned to consider them a good paying investment.

CUSTOM WEIGHING. My custom weighing at ten cents a draft paid good interest on the investment the first year, and has every year since. I bought a standard make of five-ton capacity and the scales, timbers for the frame and platform, stone and mason work, cost me about an even \$100, including a fifty pound test weight.

When you buy a set of scales be sure to get a test weight. Then if you keep the scales tested, they will be as standard as any, and you need not take a back seat for short weight. A pound is a pound, and you are entitled to it.

When you get ready to buy a set of scales do not let a few dollars' difference in the price stand in the way and lead you to buy inferior scales. If you are buying a set of wagon scales for a lifetime, which you are, get a set that will stand up, and one that you can stand behind, and be sure that the weights are correct.

When you set your scales put them where they are handy to use; don't put them in a corner where no one can get to them. Have them handy to drive onto, and collect ten cents for all custom weighing.



"What would you charge for a life-size miniature of me if I supply the paint?"—From the London Mail.

Home Education

"The Child's First School is the Family"—Froebel

Are You Dulling Your Child's Sense of Appreciation?

BY HELEN GREGG GREEN.

"Papa Bob" I heard little Mid say to her grandfather, "there's a little boy in our block who gets only one toy every Christmas. And, do you know," quaintly, "I think it's a good thing. Because, Papa Bob, when you get so many you really don't appreciate them." Her remark set me thinking.

Most parents dull their children's sense of appreciation and enjoyment by over-indulgence. Isn't it for this reason that the majority of grown-ups expect too much from life, and are more or less disappointed, and quite a little bored if life doesn't come up to their expectations? Is it any kinder to teach a child to expect to receive everything, his heart desires? And eventually that will be his attitude if we shower him at Christmas, birthdays, and other times with all the toys and clothes wished for.

Little Mid has two younger sisters. These very interesting children have two "sets" of admiring, indulgent grandparents. One Christmas Grandma Grace paid twenty dollars for a doll's carriage for the youngest of the children, and twenty-four dollars each

for two others for Mid and Baby Lamb. In less than a year each one of the expensive carriages was out of commission; a wheel lost from one, the handle broken on another, the bottom out of the third.

The reason for such carelessness? Too many toys! The children did not appreciate them. If they had, you can be assured the carriages would even now be as good as new.

Why, even little Mid, herself, admits the gifts aren't appreciated.

I know one wise little mother, a mother who could, if she were less wise, fulfill every wish of her small son and daughter, who made this ruling at Christmas: one good toy from mother and father; one good toy from grandparents; and all other gifts from the many cousins and little friends to come from the Five and Ten. And you should know these children. They are the most appreciative little folks you could imagine.

Let us not surfeit our boys and girls with too much of this world's goods. It may be a lot of fun for us, but our children will be happier if we do not dull their sense of appreciation.

THE CHILDREN'S HOUR

BRUIN IS CAUGHT IN A MAN'S TRAP.

Very early in the morning, it was when Bruin and Rolly breakfasted. Both were up with the sun, for they had planned a busy day.

Rolly was going to can some of the nice fresh vegetables from their garden for winter use, and Bruin was going over to Charlie Cottontail's house to exchange a bushel of corn for a bushel of wheat.

Charlie's home was way over on the hillside, several miles away. Bruin had been there before.

He had always gone around by the road, but this day he decided he would take a "short-cut." If he went straight north after turning the bend in the road just beyond Willie Woodchuck's house and around the east end of Sleepy Hollow frog pond, he would come directly to Cottontail's house.

The road was not quite so good this way. But it would save him about two miles of toting the bag of corn.

Walking along in the morning sunshine and fresh air, Bruin was so happy that he sang as he went.

As the sun finally climbed higher in the sky, it became warmer. Bruin sat down to rest and to eat an apple to refresh himself.

He was nearing Sleepy Hollow frog pond, when he stopped suddenly and held his head near the ground.

"Sniff, sniff, sniff!"

Was that the smell of man's mother had taught him to fear and avoid?

"Sniff, sniff, sniff!"

"No, it couldn't be, away out here!" Bruin thought to himself. He had only gone a little way when a saucy woodpecker chattering gaily up in a big tree attracted his attention. Without stopping, he looked up to see him.

Suddenly he yowled.

"Ouchie-ow, Oh, my! me! My foot, oh, my foot!"

Was it another swarm of bees, he wondered. He tried to run, but could not. The more he tried, the more his foot hurt.

Something held him fast. He could not move. What could it be? With his free foot, he poked away the leaves to find his foot held securely in iron jaws so sharp they pierced his flesh, and blood trickled down over his toes.

He was held in a man's trap, and try as he might he could not get away.

Hearing his groans, a little stranger Squirrel came to help him, but he was too small to do anything. Bruin sent him right away with a message for help to Rolly Rabbit.

Soft Bacon.

Experimental work at the Ontario Agricultural College has proven that soft bacon comes from pigs that have been fed heavily during early life on fattening feeds, while enclosed in pens or yards so small as to prevent proper exercise to the animals. O.A.C. experiments have also proven that pigs grown to 125 pounds weight on mixed feeds well balanced with skim milk (2½ pounds milk to 1 pound of meal) or tankage up to 10 per cent in the ration may be finished on corn or barley and still produce a firm, high quality product. Dairy by-products tend to offset the trouble arising from lack of exercise, but both exercise and skim milk are better than either alone.

Fox Farms in Canada.

There are 977 fox farms in Canada valued at \$7,649,877. Of these 434 valued at \$3,692,509 are in Prince Edward Island, 107 valued at \$474,047 in Nova Scotia, 86 valued at \$839,705 in New Brunswick, 146 valued at \$773,324 in Quebec, 120 valued at \$765,115 in Ontario, 19 valued at \$654,510 in Manitoba, 4 valued at \$91,825 in Saskatchewan, 24 valued at \$133,932 in Alberta, 21 valued at \$122,850 in British Columbia, and 16 valued at \$102,060 in Yukon Territory.

Protect the Lawn in Winter.

During the winter the area which in summer is a lush green carpet in front of the house is often abused. Frequently it is not only neglected, but maltreated. Occupants of the house during sessions of cold weather are prone to remind themselves that "a straight line is the shortest distance between two points," and often they economize in distance travelled at the expense of the lawn.

A well-beaten path made across the lawn in winter will probably work permanent damage. The grass may be killed and the soil so compacted that grass seed sown thereon the next season will not thrive. Such a path will generally be obvious for a number of years. A "cow path" is distinctly an unattractive feature on a lawn. The lawn sign of summer, "Keep off the paths that are making," may well be heeded throughout the year.

Another sin against a lawn is to flood it for the purpose of making a skating rink. A body of ice over the lawn in winter is almost certain to completely kill the grass. The grass will not tolerate for a long time a covering which precludes movement of air.

Young lawns should have a covering of snow. A wind-swept lawn, blown free of snow in winter, is likely to lose much of its young clover. Brush spread about tends to deflect the wind and holds the snow.

Keeping Egg and Poultry Accounts.

The Dominion Poultry Husbandman, Mr. F. C. Elford, reports that many requests continue to be received by his division of the Dominion Experimental Farms, Ottawa, for the monthly egg and poultry account forms for the use of poultrymen. This, he points out, indicates their usefulness to those who desire to know more of the profit-making capabilities in their poultry flocks. Where accounts of the revenue and expenditure are properly kept they indicate the profits from the industry compare favorably with the profits from any other branch of farming. As a rule, where a simple system is followed such as that provided by the forms, referred to, the progress of the business may be ascertained at any time and a fairly accurate balance sheet can be drawn up annually. The forms are available to poultry keepers on request.

The stomach of the young animal is not sufficiently developed to assimilate bulky, fibrous foods. Capacity to do this comes slowly, but can be encouraged by starting lightly on grass, hay or other materials which are easily digested.