Soils and Crops

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PRUNING OF TREES.

It is generally conceded by both scientific investigators and commercial growers that fruit trees should be pruned during the first two or three years of their life. This pruning is designed to produce a well-balanced tree with a strong framework capable of carrying heavy crops as the tree grows older. Experiments have shown that as a rule unpruned trees come into bearing earlier than those which are pruned. Failure to prune trees when they are small, however, commonly results in serious trouble in later years. Such trees frequently develop to many main branches, bad crotches are formed, and the percentage of breakage is heavy.

When the tree has passed the formative period the necessity for pruning is not quite so obvious, but most authorities are agreed that even after the tree reaches bearing age it is still advisable to pay it an annual visit with the pruning shears. The object of this is to remove all interfering branches and to open out the tree so that the sunlight can penetrate to each fruit spur. The labor thus expended is fully paid for by the improvement in the grade of fruit produced.

The dormant season is the logical time for pruning although when the wood is frozen the work may not be very agreeable to the grower. Where young trees or stone fruits are concerned it is probably advisable to delay the pruning until late winter or early spring, but bearing apple trees can be pruned in zero weather without apparent injury. Pruning is the one major orchard operation which can be performed to advantage during the winter months. At this time there are no leaves to interfere with the vision of the pruner and consequently he is better able to judge which branches should be removed. Furthermore, it is only during the winter that the grower has the time to give to this work.

Consistent and systematic annual pruning aid in producing more extra fancy fruit.

CLEANING HOME-GROWN SEEDS OF GRASS AND CLOVER.

The production of home-grown grass and clover seed on the average Canadian farm is confined for the most part to the seed of Timothy, Red Clover, Alfalfa, Sweet Clover, Alsike Clover and White Dutch Clover and naturally it is clean, vigorous seed that the grower wishes to secure.

To meet this requirement it is necessary that seed of strong vitality and free from weed seeds be planted each year, and because all our present methods of cleaning are somewhat inadequate, it is necessary that the soil be clean. Clean seed and clean ground are dependent one on the other. The vigorous growth of newly seeded grass or clover crop which is thick enough to occupy the available ground, will do much to smother out undesirable growth. If seed, free from the seeds of foreign plants, be sown year after year in a rotation, including a cleaning crop, clean farm land will be the result and from it will spring clean seed.

It is no small problem to secure clean seed from much of the grass and clover crop as harvested. Particularly is this true in connection with our clover. It is an easy matter to separate out light material and other foreign matter of a size different from the particular seed we are working with. A good fanning mill with proper adjustment of sieves and wind velocity will readily make such a separation. The grower with the ordinary fanning mill is limited, however, to this separation. Foreign seeds of a size and weight similar to the seed being cleaned are beyond the power of his machine to remove. Indeed the separation of some of our weeds, including both noxious and non-noxious weeds, seem to be beyond the capability of any of the cleaning machinery now operating commercially. This fact is reflected in the large amount of seed that has annually to be classified as rejected according to the Canadian Seed Control Act and also in the noxious and other weed seed allowance provided in one of the commercial grades under the same Act.

Out of the numerous experiments now being carried on in the separation of seeds by liquids will eventually come a method of separation that can be operated commercially at reasonable cost and that will perform the thorough cleaning necessary to good seed production.

In the meantime, the least that we can do is to plant on our farm only seed that is as clean and pure as can be obtained and only such land as is free from weeds.

POULTRY

The frosting of the comb of either the male or female is one thing the poultryman must guard against. It can be accomplished by having a house that is well ventilated, a house in which the moisture given off by the birds in the process of respiration is quickly carried away and replaced by fresh oxygen-laden air; for it is a fact that birds will do better in an extremely cold temperature, provided the atmosphere is dry, than they will in a much warmer temperature where the atmosphere is heavily laden with moisture. The moisture conditions seem to be conducive to freezing the comb.

Ventilation then, with a cold temperature, but plenty of fresh air, is the first way to counteract the ravages of Jack Frost in the winter. That means we should not attempt to keep our birds in a house that is closely built, but rather in one whose front is largely open. Another precaution to take in avoiding frozen combs is to be sure that the droppings boards and perches are at the back of the house, which is the warmest and best protected, and that the perches themselves are a sufficient distance below the roof, so that the combs will not come in contact with the rafters or boards.

Another precaution is to strive in some way to keep the warm air given off from the birds' bodies around and adjacent to the perches—that is, have some arrangement in the house so that the warm air as it is breathed by the birds does not immediately escape from the house. We do not mean that this air must be confined rigidly to the house, but let us find some scheme where the change of warm air from the house will be gradual, thus avoiding drafts. This can be accomplished by dropping a board or a curtain down from the roof just over the front of the droppings boards. Have it drop ten or twelve inches.

Another mighty valuable way to defeat old Jack Frost in his winter rampage is to turn on the lights about half an hour before daylight, giving the birds a grain ration at this time. This will get them to work quickly. If you have ever observed your hens in the early morning and stand around on the floor of the house, waiting for it to get light so that they can get to eating. This seems o be the time when most combs are touched or frosted. If, about half an hour before dawn, the lights can be switched on and the birds fed they will come down quickly, become active immediately and their blood stream is set in rapid circulation, and the danger of frosted combs is lessened.

The milk in a cow's udder runs in pretty exact ratio with the milk of kindness in the bosom of the person who takes care of her.

SHEEP

Many dairy farms can support a small flock of sheep to advantage where their usefulness will be found in helping to control or subdue weeds in the pasture fields or in utilizing small pasture lots or fields where the dairy cows cannot be put in handily. They can be made a source of income, too, both from wool and lambs or from well-bred registered stock.

No animal will do more than sheep to keep weeds in submission in the pasture field, if given a chance at the weeds while the leaves are still tender and succulent. Sheep are particularly fond of the leaves of plants which they strip off, leaving the plant to die.

The sheep are wintered easily, and with the addition of a little clover or alfalfa hay they will find a great part of their roughage in the stalk fields when these are not snowed under. They require very little grain until they approach the lambing period, when it will be found profitable to give them oats, which are usually not high-priced, with perhaps the addition of some corn, though we have not found it advisable to feed very liberally of corn, which has a tendency to cause them to fatten and lose their wool prematurely. It is not necessary to purchase a lot of high-priced feeds in order to keep sheep.

Nor does it take expensive or elaborate equipment to house sheep. They are a great outdoor animal, but they should be protected from rain, sleet and falling snow to prevent their catching cold. Low removable partitions or hurdles are very handy when the lambs begin to arrive, to keep the ewes with young lambs separated a few days. If ewes are bred to have the lambs come during the month of May most of the lambs may be dropped in the pasture field, as some farmers make a practice of doing when barn space is too limited to house all the ewes and early lambs comfortably.

To Make White Lotion.

"White lotion" for treatment of barbed- wire wounds and other shallow wounds is composed of one ounce of acetate of lead, six drams of sulphate of zinc, and one pint of soft water. Label the bottle "poison," and shake well before using.

Other medicines useful for wounds are tincture of iodine, permanganate of potash, boric acid, calomel, and oxide of zinc ointment. Calomel is used for "thrush." Bluestone in solution is the most effective drug for root rot of sheep and cattle.—Dr. A. S. Alexander.

When leaving a lunch ready for a belated dinner, place a tin or granite pan over each plate or bowl of eatables, and they will keep moist and fresh many hours.

Vegetable Vitamins—Their Functions in the Diet.

An especially interesting article on vegetable vitamins has been contributed by Mr. L. F. Burrows, Secretary of the Canadian Horticultural Council, to the November-December Agricultural Gazette. The value of vegetables as a diet, physicians say, lies largely in the vitamins they contain, and these vitamins are necessary to life. The writer of the article goes into particulars of the vegetables that contain this element to the greatest exent.

Three distinct kinds of vitamins have been identified; they have been designated "A," "B," and "C." Vitamin A, we are told, is a mysterious element in food without which children cannot grow but which grown folks also need. Leafy plants are valuable foods in this respect, spinach and chard ranking first, lettuce next, and cabbage third. Tomatoes are rich in this vitamin and Hubbard squash is said to be a valuable source. Vitamin B is guardian of good digestion and proper functioning of the liver and other glands. Potatoes, sweet and white, contain appreciable amounts of this vitamin, but turnips and onions are better off. Beets, tomatoes, sabbage, spinach, lettuce and parsley also contain it, so too does the lowly dandelion. Most fruit juices and even nuts are said to possess appreciable amounts of this vitamin. Vitamin C prevents disease and promotes the general health. Lack of it, we are informed, gives the skin a bad color and makes the heart weak. Lemons, limes, oranges, and fresh fruit seem to be beneficial in this respect. Again the tomato shows to advantage, its juice being regarded as equal to that of the orange. The Swedish turnip, or rutabaga, is valuable as a source of vitamin C, so also is the carrot, particularly young carrots. Potatoes, onions, parsnips, rhubarb, lettuce, cauliflower, and cabbage may be counted in. Raw cabbage is said to be especially strong in this vitamin.

Satisfactory Results of Cow Testing.

The beneficial effect of cow-testing is abundantly shown by results achieved at the Oka, Que., Agricultural School. In 1920 the average production of 44 cows, Ayrshires and French-Canadians, was 6,733 lbs. milk, 257.7 lbs. fat, and 383 percentage. In 1922 the average production of 46 cows of the same breds was 8,901 lbs. milk, 346 lbs. fat and 3.88 percentage. The average increase per cow in milk in three years was 2,168 lbs. In 1920 only eleven cows in the herd produced over 300 lbs. fat; in 1922, thirty cows exceeded this amount, or over 66 per cent. of the animals in the herd. In Kent County, Ontario, by following the cow-testing method, conducted by the Dominion Dairy and Cold Storage Branch, an average of 7,488 lbs. milk and 246.5 lbs. fat was increased to an average for eleven cows in the same three years to 10,235 lbs. milk and 346.4 lbs. fat, an increase per cow of 2,747 lbs. milk and 99.9 per cent. fat.

Modern agriculture must be organized agriculture.

"I Never Thought of That."

Neighbor Smith and his hired hand were busy sawing up a tree that blew down the night before, smashing up a number of his bee stands, when his friend Brown happened along.

"At last," said Brown, "the old tree you have braced with props and anchored with wire for years, to keep it from blowing down on your bee stands, has fallen. Why didn't you move the bee stands and let the old tree fall?"

"Well," replied Smith, as he slapped his hand on his leg, "I never thought of that."

The man who does so little thinking as to take but one view of his business is likely to blunder many times, just as Smith did with the old tree and his bee stands. Just such blunders turn profits into loss on the farm.

The successful farmer to-day is a thinking man. If he has a task before him he debates in his mind the many different ways of doing it until every detail has been thoroughly thrashed out and a profitable solution has been found.

Probably no other business requires the careful and continuous thinking that successful farming requires. What to do, how to do it and what to leave undone are three things that will make any farmer scratch his head and think for all he is worth, if he does them justice.

One of the most successful farmers I ever knew said he paid his hired men more willingly for thinking than for work. Doing farm work unplanned is merely playing a game of chance that is just as likely to lead to loss as to profit. Work preceded by serious thinking and planning is more than likely to be a paying proposition. —J. C. Conger.

Keep the Dropping Boards Clean.

The "classical" poultryman, who is scrupulous about everything he does, may be able to hire his dropping boards cleaned every morning. It is the most sanitary method. But the one-man poultry plant can not always have it done that way.

I know a farmer who cleans his poultry house about once a year. Of course it is a sight, and of course he gets poor results. He ridicules the "book farmer" who is "always fooling with his chickens." He is a sample of the old-time farmers, who are growing less every year, thanks to the experiment stations and the agricultural press.

Between the two extremes, cleaning the dropping boards once a week seems to fit in with the one-man plant. In the summer I sprinkle ordinary dry dirt on the boards after I have cleaned them. In winter, sifted coal ashes. All the year I add phosphate (phosphoric acid) to help make the droppings a balanced ration for the garden.

He who would look with contempt upon the farmer's pursuit is not worthy of the name of a man.—Beecher.

It is those things which he is not compelled to do—the just treatment of the helpless—that test the fibre of man's character.

How Our Community Amuses the Young Folks

The Rutland Community Association, Inc., has proved that no rural community need be without recreation. In three short years it has revolutionized our social activities and provided us an inexhaustible store of enjoyment.

Three years ago our social centres were the rural schools and stores and church. These were very well in their way, but—Friday night found most of our young people journeying toward the nearest city.

Some of the older people were dissatisfied with this state of affairs. They thought there was a remedy, and so they formed a community association. They got the young people into it, made them officers, and stirred them up until they became enthusiastic.

Our first aim was a community building, the site of which was contributed by a man having two girls and a boy in his family. Money for the building we obtained partly by subscription, partly by loans, and partly by earning it. Plays were given, and a field day was held on Dominion Day. Donations in money exceeded two thousand dollars, while carpenters and other workers gave their time. Notes were issued for about one thousand dollars.

When the building was completed, the association, now incorporated, had almost doubled its membership. The officers of the association were the president, vice-president, secretary, treasurer, and the council. This council is a body of six, headed by the president. Each of the other five members represents one of the following branches of work carried on by the association: social, athletic, dramatic, educational, and musical.

The whole countryside is interested in the work. People like to attend the doings. They like to know what things are going on. Best of all, they feel proud that their community is truly up to date.

Of course, there was opposition. Several well-intentioned people thought it would hurt the church. They called our new building the "Devil's Playhouse." Others contented themselves with disapproving of it.

We were fortunate in possessing a sensible minister. He realized that friendly relations between the two would be of benefit to the church. His efforts resulted in a larger attendance at church services and a good reputation for the association.—Marion Frink.

Our community organization is known as the Evergreen Sporting Association. The name was adopted more than twenty years ago, when the principal event was a hunt by the young men, and the side which killed the most game was banqueted by the losing side. From that small beginning our club has developed until now everyone is eligible to membership, from the smallest school child to the oldest grandparent.

During the year we have the hunt, a field meet, three ball games, three literary and musical programs, and a grain, livestock, and domestic science exhibit. Points are counted on each event, and competition is so keen between the two sides, the Reds and Greens, that out of a total of twenty thousand points there is often a difference of less than one hundred. At the end of the year a banquet is served by the losing side, and new officers chosen for the next year's work. New sides are chosen each year, and families that were rivals one year work together the next.

We have a neighborhood picnic each year at the time of the field meet. We also have a party once a month. At these parties the host and hostess furnish the house and provide for the seating and lighting so that a crowd of one hundred people may be accommodated. One committee furnishes and serves the refreshments, and another provides the entertainment.

Our neighborhood is near two towns, where the young folks attend high schools. The social committee often has trouble to find dates that will not interfere with school programs, but the E. S. A. parties are always first in importance, even with the school folks.

We are glad that our children are growing up with a love for the farm and an appreciation of their privilege of being a member of a neighborhood organization like the Evergreen Sporting Association. — Mrs. Raymond Paine.

Home Education

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

Pink Oatmeal to Tempt Children—By Marion Brownfield.

What child does not prefer a nice, snowy, frosted cake, to a dish of gray oatmeal? As a child I could hardly eat salt fish hash. Because of its flavor? Oh no! But because it looked so dirty! (Cod fish and boiled potatoes in combination do make a rather unattractive color.) Also its fibrous texture made me complain, "Mama, it tastes like flannel!"

Thus a squeamish appetite may be prejudiced against wholesome food because of its unattractive appearance. This is more often the case with children than is generally realized. Of course, a finicky taste is not to be encouraged but many a time a little management will persuade youngsters to eat plain hearty food until it becomes a habit with them.

Attractive colors more than anything else appeal to children. It is true that candy is sweet, as well as bright-colored, but all fruit is not sweet, yet it is equally tempting to most children because of its cheerful enticing color. Breakfast food, therefore, is worth coloring.

There are several ways to do this. Fruit juice from a can of strawberries, peaches or apricots makes a tempting sauce for oatmeal. Fresh fruit juice is even nicer still. A little jam dotted here and there is effective, while a teaspoonful of red jelly can be whipped through the cereal to give it a delightful pink color. This last way prevents the child from merely eating the "color" and avoiding the cereal, for what child's heart does not go out to a pink mixture even if it happens to be an insipid gelatine? A bit of chopped fresh fruit makes cereal tempting as well as palatable. This also can be beaten through the food.

With still other items on the bill of fare one should aim for a pleasing color effect. Many simple desserts such as farina, junket, cornstarch pudding or custard can be "pinkened" with the coloring that comes in packages of gelatine. For the child who enjoys chocolate, cocoa will give both the color and flavoring so desired by him. It is both nourishing and novel mixed with sugar for breakfast foods. Chocolate sauce can also be indulged in once in a while to dress up plain desserts.

Even the dishes help make food attractive. Pink dishes are worth investing in if they persuade a child to eat the despised potato. Milk, which many parents pay a child to drink, will sometimes be cheerfully taken if it can be drunk from a certain alluring mug the child has fancied. Where this inducement is held forth, the coveted dish or mug must not be used for other items of diet, otherwise it loses its novelty and "special occasions" value.

For Years I Didn't.

For many years I farmed and only jotted down what I paid out and received in a small notebook, and let it go at that. When on some cold winter day I would look over my book, I found that I really did not understand it myself, and could not see my financial condition.

Then I started systematic bookkeeping. I have one cattle account, including cream and steers sold, one wheat account, one oats, one flax, etc.

From my hog account I learned that I was losing money.

My poultry account shows a profit. Before I kept books I could not tell, really did not know, what the feed cost or how much they ate. Now when I bill a 10-bushel box I debit the poultry account and credit the feed account with the cost of it.

Whenever I take a trial balance—usually once a year—it shows me (1) gain or loss on any one of the accounts; (2) gain or loss during the year on the whole; and (3) it enables me to make a businesslike statement if my income is large enough that I have to pay income tax.—B. O.

Two Misses at Once.

When two or more troubles come at the same time the car owner has a real puzzle, as one recently found out. He was running a truck along the road when the engine started to miss. In the course of a few minutes it became worse, and soon the engine stopped.

Cranking to start it brought one or two explosions, but it would not start. The truck was towed home and an examination made. The plugs were taken out and put on the cylinders and the engine turned over by the crank. The spark was very weak; in fact, it could hardly be seen at all.

The coil was taken off and tested at a near-by service station. It gave a very weak spark and another one was used. Still the spark was not good and the engine missed so much that it would hardly run idle.

Examination of the distributor showed the trouble. The contact screw had loosened until the contacts hardly met when closed, and when open had four times the ordinary gap. The contacts were adjusted and the engine ran smoothly.

Dairy Products to Britain.

Denmark during the nine months ending September 30, shipped 1,399,470 cwts. of butter to Britain; Australia 444,571 cwts., New Zealand 940,120 cwts. and Canada 10,714 cwts. The Netherlannds, including Denmark, shipped in the same time to the same destination 149,007 cwts. of cheese, Australia 39,284 cwts. New Zealand 1,211,986 cwts., and Canada 558,030 cwts. A leading British firm reports that recent shipments of butter from Canada have been very satisfactory and that quotations are 188 to 190 shillings per long hundredweight, or a little over forty cents a pound.

Feeds Cornmeal to Cows.

It has been my experience that during the summer months a too liberal feeding of cornmeal to the dairy cows is wasteful; yet, in the winter time, I believe it is very profitable to include it in fairly liberal quantities.

The quantity to mix in the ration depends upon the roughage ration. When I feed corn silage and clover or alfalfa hay, then I plan to feed from four to five pounds of cornmeal in the ration of each cow per day.—L. C. R.

Half-hearted effort will never bring success in poultry keeping or any other line of endeavor. In order to accomplish anything, you must be enthusiastic and get a hustle on.

More prisoners attribute their fall to betting than to any other cause.—Detective-Inspector Thompson.

THE CHILDREN'S HOUR

A LITTLE BOY SAVES BRUIN.

Bruin groaned in the tight grasp of the man's trap. How his foot ached and pained! Twist and squirm as he might, he could not get loose. No matter in what position he stood, the pain was no easier.

To Bruin it seemed a long time. Yes, a very long time, since the little stranger Squirrel had started with his message to Rolly.

He knew Rolly Rabbit would bring help as soon as possible. But he wished he would hurry, or—

No sooner had he thought this than he turned to see a man coming, winding his way among the trees.

His heart went thump. Forgetting the trap, he started to run. But he could not get away. The sharp teeth of the trap cut deeper into his flesh.

The man came running toward him. "Ah, Ha. At last I have you, you big rascal. What a nice fur coat you will make me, Mr. Bear," he said. "Now to get you home."

Bruin could not understand what the man meant by these strange noises but his tone made him more afraid.

Taking some shells from his pocket, the man put them in his bang, bang gun. Bruin had never seen a gun like this before, but he remembered about what happened to Mrs. Rolly Rabbit. His knees trembled and he was weak.

Just as the man raised his bang, bang gun to shoot straight at Bruin, a little boy came running up behind him.

"Don't shoot him, father. He is so small and cute. Please, can't I take him home?" asked the little boy. "I have the muzzle and rope right here."

The man thought a few minutes, then answered, "Perhaps he is too small for a coat anyway. Yes, we will take him home, son, and you may have him for a pet."

"Just see how frightened he is, poor little fellow," said the boy.

He talked to Bruin in gentle soothing words, but it was with some difficulty that the man and the boy finally got the muzzle fastened on him.

Bruin was very doubtful as to just what they were going to do with him, and he cuffed on every side with his paw and tried hard to get away. The muzzle over his head was very uncomfortable, but try as hard as he might, he could not get it off.

At last he became too tired to resist any longer. And after weary miles of walking, Bruin found himself fastened to a tree. Nearby was a big house, bigger than Bruin had ever seen before in his life. The man and the boy left him alone and went into this big house.

A Close Call

Hubby (dropping 'phone receiver)—"That was a close call!"

Wife—"Gracious, did you get a shock?"

Hubby—"No; I was talking to Jones next door.

The most important part on the tractor is the nut on the seat.