

Soils and Crops

By Agronomist.

This Department is for the use of our farm readers who want the advice of an expert on any question regarding soil, seed, crops, etc. If your question is of sufficient general interest, it will be answered through this column. If stamped and addressed envelope is enclosed with your letter, a complete answer will be mailed to you. Address Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

The Summer Care of Vegetables.

Root crops, such as beet, carrot and parsnip, should be carefully weeded and thinned while the plants are still small. Parsnips should be thinned to about four inches apart. Swede turnips six to eight inches. Carrots may be thinned to one inch apart and, when large enough to use, alternate roots pulled, leaving the remainder about two inches apart. Garden beets may be similarly handled, but the final distance in this case should be about four inches. As beet tops make a very delicious early green vegetable, thinning should be done so that these tops may grow to a useable size. The soil should be kept cultivated and never allowed to bake or harden. This is particularly true with peas and beans if a tender, succulent crop is desired. Beans, however, should not be cultivated when moist with either rain or dew, as the plants, if injured under these conditions, are particularly subject to bean rust (the spots of this disease developing in the injured tissue).

Corn that has been sown in hills should be thinned to three or four plants to a hill, if the hills are two to two and a half feet apart. Cabbage and cauliflower plants require eighteen to twenty inches of space to each plant in the row, and the rows should be two and a half feet apart. The soil should be kept well hoed to conserve the moisture and encourage rapid growth. Where space is limited tomatoes may be grown in rows three feet apart and the plants eighteen inches apart in the rows and tied up to stakes. Cucumber, squash, pumpkins and melons all grow best on a light, warm soil. Five or six cucumber plants may be grown in a hill, the hills spaced about three feet apart; squash and pumpkin three or four plants in a hill and the hills six to eight feet apart. Where the soil is rich and warm and space limited, hills of cucumbers, squash and pumpkin may be planted between alternate rows of corn.

Potatoes should be thoroughly cultivated to conserve all possible moisture; "ridging" the soil around the tubers with loose soil in which to develop. However, in areas where there is a light summer rainfall, level cultivation will conserve the soil moisture more satisfactorily. Spraying should not be delayed until there are signs of injury from the well known potato beetle, or from one or more of the many potato diseases. Paris green and arsenate of lead have been found very satisfactory poisons for the beetle and can be applied at the rate of one ounce of Paris green to four gallons of water, adding one ounce of lime to neutralize any free arsenic present. Arsenate of lead adheres better to the foliage than Paris green and may be applied at the rate of one ounce to a gallon of water, if the paste form is used, or one ounce to two gallons if the powdered form is employed. Bordeaux mixture may be made up in small quantities in the following manner, employing wooden pails for mixing the spray. In each gallon of water dissolve two ounces of copper sulphate (bluestone), slake one pound and a half of quick lime (unslaked lime) in one gallon water, stir thoroughly and then add one pint of the time water for each gallon containing the two ounces of dissolved bluestone.

Poultry

Hens of light breeds may be profitably kept for three seasons; those of the heavy breeds for two seasons. Milk is no substitute for meat, for it is not sufficiently concentrated. It is impossible for fowls to drink enough of it to take the place of meat. When fed with animal food, milk performs excellent service. Turkey eggs are nearly as good as hen's eggs, and geese eggs are preferable to either for all culinary purposes. Duck eggs have a rich flavor, but are not so desirable to eat alone. However, they are excellent for all purposes of cookery.

Killing poultry by stabbing in the mouth is the most humane method, notwithstanding that there are folks who believe the method an act of cruelty. When a fowl is stabbed in the mouth the brain is penetrated and the bird at once becomes insensible to pain. This conclusion has been reached by authorities from the fact that there is less struggling than when the head is cut off.

Hens that are laying are not likely to accumulate fat; it is when they are not laying that they do so. Keeping hens in good condition does not mean that they must be heavy. Fatness alone is desirable when they are being made ready for market.

Good layers are bred up and not fed up. All the feeding in the world can not induce a naturally non-productive hen to change her nature. A close record should be kept of the

The Growing Pigs.

With all kinds of grain and by-product feeds at present prices it is evident that the farmer who plans to make maximum use of forage crops and grasses in carrying his spring pigs along in a thrifty and growthy condition until his 1919 corn crop is fit for feeding will make good profits from his business. Some grain will be needed to enable the pigs to make economical use of the pasture crops, but care must be taken to guard against feeding more dollars' worth of grain feeds than the pigs will be worth by the time the new corn is ready for conditioning them for market.

Experiments prove conclusively that gains made on grasses are always cheaper than gains made on grain or by-product feeds. During ordinary years a saving of about thirty-five per cent. may be made in the cost of producing the first one hundred and twenty pounds of growth by providing good pastures for the pigs. Under present conditions a skillful feeder should be able to make a saving of more than fifty per cent. in carrying his pigs along in good condition until his corn crop is matured sufficiently for fall feeding. By making a more general use of pasture crops the pigs may not attain heavy weights, but if they are fed limited quantities of grain feed they will be thrifty and capable of making economical use of the corn crop when it is fit for feeding.

Alfalfa, clover and bluegrass are the ideal crops for pastures but the hog grower who has failed to provide an abundance of these valuable crops can do the next best thing and sow oats and peas, rape, corn and mixed crops. The kind of grain to feed in connection with pasture crops will depend largely upon the quality of the pasture crops and the prices of the various grains and by-products. When the pasture crops are legumes, such as alfalfa, or clover, corn will be the most economical grain feed. But when the pastures are made up of bluegrass, oats and peas, rape and mixed grain crops it will pay better to feed linseed meal, tankage, and other rich protein feeds in connection with the corn. In comparing the results of feeding experiments reported by several of the leading stations we find that the amount of grain fed with grass and forage crops is of greater importance than the kinds in making up economical rations.

On pasture crops alone pigs will just about hold their weight, so if gains are to be obtained it becomes necessary to feed some grain feeds in addition to the pasture crops. At present prices of grain feeds it will probably pay to feed from one to one and one-half pounds of grain daily to each spring pig that has the run of suitable grass and forage crops. If the pasture crops fail to make satisfactory growth more grain must be supplied, for there is no economy in allowing the pigs to become undernourished before the corn crop is ready.

Still further economies in feeding may be made by turning the pigs on the field as soon as the corn is fit for "hogging down." This will save a number of days' time and more feeding value will be obtained from the field than by husking the corn and feeding it to the pigs later in the season.

product of each hen on the place, and the non-productive hens should be sent to market or to the pot.

Some hens are gluttons, and in their greediness will seize food to prevent other, more security, from their share. Those are the hens that become overfat and finally quit laying. When food is given in a way that permits the hens to eat without having to scratch, there is sure to be an unequal distribution of the food among the fowls of the flock. The proper way is to scatter the grain over a large surface, so that each hen will be compelled to work, and all will fare alike.

Mixed grain for poultry has this advantage: Each fowl can pick out the grain most needed. This was called to the attention of the writer by seeing a hen that was out of condition. She would not eat corn readily, but would pick out the grain she was in need of. Corn seems to be the grain most desired by poultry, but too much has a tendency to put on fat rather than produce eggs. Therefore, if the hens are given a mixed grain ration, after consuming the corn in the mixture they will select from the other grains those best suited to their needs.

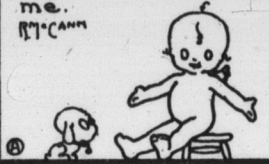
Some sheep on every farm will help pay for a bathroom in every farmhouse.

It prevents hammer marks to place a piece of board on top of the wood that needs pounding.

With the exception of the turkey, all our farm animals and poultry were imported from the Old World.

THE CHEERFUL CHERUB

I've lost some great and stylish friends. I'm glad as I can be. The strain of living up to them was nearly killing me.



Horse Sense

If this year's colt is to be developed into a good horse, now is the time to begin. If the weather will permit, the young colt and its mother should be kept on pasture as much of the time as possible. Life on pasture increases the milk flow of the mother and permits the young colt to get the exercise necessary for its development.

The colt will be freer from disease if kept away from stables that are likely to be unsanitary. Later in the summer, when the flies begin to bother, a partly darkened shed of some sort is beneficial to protect the animals from the sun and flies. If a shed is not available, shade trees answer the purpose very well. Plenty of cool pure water should always be at hand.

Colts should not be allowed to suck when the mares are hot, without first milking out the mares' udders. Do not let colts follow the mares at work.

The Dairy

One Cause of Impure Milk.

While sanitary stabling is conducive to the physical wellbeing of the cow, as well as to the esthetic satisfaction of the owner, yet, by itself it is no guarantee of pure milk production. To prove this statement let us trace the usual operation of milking the cow and handling the milk. We will assume that the outward conditions are perfect.

The milker enters the barn. He has not changed his clothes since he brushed his horses, cleaned the stables or did other work about the barn. He carries two wide-mouthed milk pails. He may, if he desires to be careful, bring a little tepid water to wash the cow's udder. After pouring out this water, he stands that pail in the alleyway and proceeds to milk into the other, which rests upon the dirty floor. Having filled this first pail he exchanges it for the other, and proceeds with the milking. Meanwhile the milk in the first pail

Health Talks

By John B. Huber, AMMD

Dr. Huber will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not, it will be answered personally if enclosed. Dr. Huber will not prescribe for individual cases or make diagnosis. Address Dr. John B. Huber, M.D., care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

Summer Complaints.

Bottle fed babies are especially prone in the hot, humid summer months to inflammation of the stomach and intestines, such as are induced by milk, either unwholesome or improperly prepared. Infants and children under two are mainly the sufferers.

There is a mild form in which the stools are curdy, loose and foul. The fever is moderate and the child fretful. The stools soon change to a greenish yellow; they come 5 to 6 times the day; and the fever goes up to 102 or more. If prompt measures are taken recovery is rapid and complete.

In severe summer complaints vomiting, with loose frequent, spinach stools and high fever, may obtain at the outset. No matter what food is offered, the child is like to vomit. The fever and inability to take food produce weakness and very rapid emaciation. Later there is a comatose condition, with marked prostration. The pulse is weak. The stools may be streaked with blood and may contain mucus. The fever may rise to 105 degrees; and there may be convulsions, all too frequently ending in the child's death. In the toxic (poisonous) form the symptoms are severe from the outset. High fever and intense prostration are added to the vomiting and there are many green and foul stools. The child soon becomes delirious; and coma all too frequently ushers in the end.

A child with summer complaint must be placed in the coolest, cleanest and largest room possible. A cotton slip and a diaper only are to be worn. The fever is reduced by frequent cool sponging and by tepid baths. Give an initial purge with castor oil, a teaspoonful to an infant; a tablespoonful to a child of two. Or

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is absorbing dust, stable odors, bacteria and flies. Having filled his second pail, the milker leisurely carries both to the milk house or to the cans which stand at the end of the alleyway or just outside of the stable door. When he pours the milk into the can one hand touches the bottom of the pail that stood on the floor of the stable. He overlooks this, unless the result is too obvious, takes his pail and goes back to repeat the performance. It is very plain to see that the most perfect stable sanitation is of little avail with such slovenly methods practiced.

A Handy Tool for Farmers.

One of the tools that I always thought of as a mechanic's tool is a hack saw. Now I find that such a saw is about the handiest tool I have around the farm.

They cost from 50 cents to \$1 for a good frame and some blades, and save that in time and bother in a little while. I like the adjustable frame, as it will take most any length of blade. It is also handy to buy longer blades and then, if they break, bore a hole through the end and use the short piece. For my own work, however, I like to buy the short blades—eight inches or less—as they do not break so quickly. The breakage is more of the expense than the wearing out.

There is a blade on the market which does not break easily. It is called flexible. It will bend a good deal before breaking, and will be serviceable until worn out.

I find that the number of points or teeth to the inch makes a difference in the cutting. Until lately I have had 14 points to the inch. Now I get 24 points, and like it better for every kind of work.

Any bolt that turns in the wood that it holds together, or a piece of iron, can be quickly cut off with a hack saw. I have cut small pipes off in a hurry, or cut a hole in the side of a pipe with a hack saw. If you want to put a cut-out on your machine, this saw will save the price of the garage man's work, and you can do the job in a hurry by sawing a V-shaped hole in the side of the exhaust pipe.—E. R.

You may not believe it, but some of those people you are envying so much are troubles that are harder to bear than your own.

Never buy a farm in a strange locality until you have found out what old-timers there think it is worth.

Good Produce Sells Best.

In marketing farm products I found long ago that a high quality article will generally sell itself if put before the people; and after you have made a reputation the only trouble is to produce enough to supply the demand.

A little advertisement in a farm paper sells all the calves or larger cattle there are to spare. The corn, wheat, and potatoes are sometimes grown by contract for seedsmen, and sometimes sold direct to the buyer.

Care is always taken to have all grains clean and in good condition when sold, a little better than sample shown, if possible.

If it is only eggs you have to sell, they should be nice. Better keep at home any mishapen, small or discolored eggs than to put them in an "order."

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GLENN CRAIG TOBIAS - UNDERWRITER

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SEEDTIME AND HARVEST.

In the fall, when the ground has been plowed and harrowed until it is soft and loose and smooth, the farmer sows his wheat. Back and forth across the big field he goes day after day until he has finished. He works long, and the labor is hard. How glad he is when he has made the last round and turns the horses toward home!

That is the seedtime. Long months of waiting must pass before he sees the field of waving grain, and rides the binder as it makes its rounds of that same field, hears the roar of the thrasher and hauls away the wheat. All through the long winter he waited; but the harvest came at last, as he knew it would, for God has promised both seedtime and harvest. Because he expected the harvest he sowed his seed and waited through the long months of growing and ripening.

An acorn falls to the ground. It is very small and does not appear to hold much promise; but the warm, damp earth covers it, and it is lost from sight. That is the law of its life, "without which there would be no hope, for that is the seedtime of the acorn." Now the harvest will come, for seedtime and harvest is the order that God has made.

How long it is in coming! A little "shoot" appears through the ground, to be sure, but no one would call that an oak tree. You could snap it off with two fingers. Another year passes, and you look at it again. It is a little larger than before, but still not an oak tree. An oak tree should be two or three feet in diameter and strong, like a pillar of marble. This is no larger than a man's thumb.

A generation has passed away. The small boy who saw the acorn fall and who watched it grow year after year is an old, white-haired man now, sitting on the porch of his home. Out in the yard children are playing. They are his grandchildren. They have a swing hung from the limb of a great oak tree, and in the shade of its wide-stretching foliage they have their play ground.

How happy they are! How many jolly times they have had under that tree! About it have gathered all the joys of childhood. The oak tree has a place in their lives with their mother and home. It has always been there, to them; but the old man, in his reverie on the porch, remembers the fall of the acorn and the years of a long life that have passed while the harvest of that seedtime was coming to perfection.

There is seedtime and there is harvest in every life. There is home training. There are school days. There are hardships and disappointments. There are joys and sorrows. There are successes and failures. There are temptations met and overcome.

If we sow the wind we reap the whirlwind; if we sow wild oats, we reap tares. But oh, what rejoicing there is in the harvest time of a life that has sown its good grain in the seedtime and carries home the full sheaves in the evening!

Topics in Season.

Berries intended for shipment should not be picked when they are wet with dew or rain. Deep cultivation in the orchard may do more harm than good. Three inches is deep enough around trees—once in two weeks.

No grain crops should be grown in the orchard, it doesn't pay. Cultivated crops may do while the trees are young and their roots do not need all the space; but that time is soon over, and then the trees should reign supreme.

Cultivate the new strawberry bed and the bush fruits about once in ten days. But shallow, please! Surplus suckers in blackberry or red raspberry patches should be treated just like weeds; don't let the rows get too wide nor too thick.

Curing timothy: Cut timothy just as the bloom is falling. If the crop is not too heavy and rank, cut as soon as the dew is off, let it cure a few hours, rake into windrows, and haul to the barn the same day. If the crop is rank, cut it in the afternoon; it will wilt some during the night and dew will not hurt it. Next day's sun will dry it in a few hours, when it can be raked into windrows; haul it to the barn in the early afternoon.

Curing clover: Cut clover hay when about half the blossoms are brown. Cut it as soon as the dew is off in the morning. At noon shake out the bunched, rake into windrows before evening dew gets on it, and let it lie until next day. Next day shake out the hay as soon as the dew is off. You ought to be ready to haul, on a hot day, by eleven o'clock, or certainly after dinner, no matter whether you have ten loads or enough to haul with an engine. It spoils clover hay to get too dry. It should never be put into the barn when wet with rain or dew; but a little sap won't hurt it.

"We must go back to peace trade on a wartime scale," says the Canadian Trade Commission, "if the huge war debt is to be paid."

There must be no adverse balance of trade if Canada's prosperity is to be upheld. The Canadian Trade Commission is trying to get class and mass to understand the purpose of the message.