

# 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.

## Raising Green Ducks for Market.

The profit in duck culture comes from selling the young ducks as soon as they begin to get their mature coat of feathers. By that time they are about eight to ten weeks old, and are termed "green ducks." After that they grow less in weight and condition. The green duck in the hands of a competent chef will, in taste, closely resemble the flavor of the famous and now almost extinct, canvasback duck.

Green ducks bring the best prices in June, and from then on the price gradually falls. From September to November ducklings again command good returns. The saleable market duck must be fat, plump and round, and the skin must be of a uniform color.

Flavor is imparted to the carcass of the bird by the food it eats. The wild herbs, plants and fish which ducks eat give the rank taste to the meat and eggs. Feeding largely upon wild celery is what gives that delicious taste to the canvasback duck. It is said the Congo chickens owe their superiority of flavor to the pineapples they eat. The flesh of the grouse of the far West is aromatic with the wild sage. There is a fishy flavor to the meat of wild ducks and other sea-fowls.

For good flavor green ducks are fed a grain ration of equal parts of bran and cornmeal, with a proper amount of beef scrap. Bran must not be left out of the feed, for its absence will cause a loss of appetite. As the market demands a white skin, green food (or a very little of it) should not be fed to ducks grown for market.

Two weeks will be sufficient time for fattening ducklings, beginning when they are seven weeks old. At first they must be fed lightly. The amount should not be increased for about five days; after that they can be given a little more each time, as long as they eat it greedily. An excellent fattening food is made of four parts cornmeal, two parts low-grade flour, one part bran and two parts beef scrap, all these parts by weight. Add to this a little sand, shell or grit to aid digestion.

The killing is done with a knife. The bill is held open and a cross cut is made in the back of the throat on the inside, so that no wound shows on the outside. This severs the large arteries and pierces the brain, causing relaxation of the skin and muscles. Immediately afterward the fowl is struck on the head with a club. The blood is caught in a galvanized pail, and picking begins.

The picker sits on a chair drawn up alongside a box which is about as high as his knees. The feathers are plucked and are thrown into the box. The duck is held placed across the lap. The head is held between the knee and the box to prevent fluttering, and that the blood that escapes may not get on the feathers. While the picker is removing the feathers, he frequently dips his fingers into a dish of water which is always within reach. This causes the feathers to cling to the fingers, enabling the operator to remove them more rapidly and with much less exertion.

The pin feathers are removed by catching them between the blade of a knife and the thumb. This operation is more rapid when the pin feathers are wet. The head, neck and wings are not plucked. A string is tied around the body of the bird to hold the wings firmly in place.

Immediately after the carcasses are dressed they are plunged into ice cold water which removes the animal heat, shrinks the flesh, and makes the fowls more plump. They are kept in this water until shipped to market.

The Pekins are the commercial ducks of Canada, as the Aylesburys are of England. They are rapid growers and mature early. This breed is probably the only one that ever produced ducklings weighing five pounds when seven weeks old. Of late years the Indian Runner has come into the market as a "broiler duck," and while it is no competitor, it supplies a demand for a small, delicious carcass that is profitable. It is to the broiler class what the Pekin is to the roasting.

## Harvesting Sweet Clover Seed.

White sweet clover and biennial yellow sweet clover may be harvested for seed the year following seeding. The time of cutting the seed crop should be governed largely by the machinery which is to be used. If the plants are to be harvested by a self-

## Remove Rhubarb Seed-Stalks.

Seed-stalks which develop upon rhubarb plants ought to be removed before the blossoms set seed. Seed development draws heavily upon the plant. One of the most prevalent causes of failure with rhubarb in the home garden is seed-stalk development. This causes the leaf stems to become smaller and smaller year after year, until it hardly pays to care for the plants.

Rhubarb should be harvested when after about the mid-

rake reaper or a grain-binder, they should be cut when approximately three-fourths of the seed pods have turned dark brown to black. At this time some flowers and many immature pods will be found on the plants, but the field will have a brownish color. Where a grain header is employed, the plants may become somewhat more mature before cutting. More seed is shattered when the plants are cut at this stage than when cut earlier; but this is not necessarily a loss, as the grain header is used for the most part in semi-arid sections where shattered seed is depended upon to reseed the land.

Much seed may be lost if harvesting is delayed for only a few days. Many fields have been observed in which ninety per cent. of the seed had shattered in less than two weeks after the time the plants should have been cut. Cutting the plants when they are damp from rain or dew will reduce loss by shattering.

When it is possible to thresh in a week or ten days after cutting, the crop should be threshed directly from the field. Ordinarily, little seed will be lost during this time, and the work of stacking will be avoided. The seed may be threshed either by flailing or by the use of a grain separator or a clover huller. The yield of sweet clover seed varies from two to ten bushels of re-cleaned seed to the acre. Sweet clover straw may be utilized for soil improvement, or as a roughage for stock.

## A Threshing "Ring."

Any community co-operative enterprise that has been active for seven years and is still popular and prosperous is admittedly beyond the experimental stage. Judged by this rule a neighboring threshing ring organized in 1911 by ten Illinois farmers can safely be considered a "going concern."

Hopelessly tired of waiting their turn after delays some years lengthening into weeks, this group of men met, organized, elected officers, paid \$80 each into their treasury, erected a \$300 storage building for their threshing outfit, and were ready to put their ring to ringing all within a week after their initial getting together.

Included in their get-ready movement was the borrowing at six per cent. of \$2,200 at a local bank, which, with \$500 remaining in their treasury, was used to purchase a 20-horsepower engine and a 36-60 separator.

Here is the outcome briefly told: Five years later their loan was fully paid, and in addition the conclusion of the year furnished them a dividend of \$28 for each member of the ring. Last year's dividend was \$55 a member after painting their storage building and making all necessary repairs. This year, as this is being written, the ring's yearly accounts have not been reckoned, but the members are agreed that they can count on at least a \$50 annual dividend during the life of their equipment, which, with good care, is depreciating but slowly.

How is such a successful trick turned? Each member has his oats threshed for 1 1/2 cents a bushel (and other grain in proportion) instead of the growing and varying high-prices usually charged. The money paid by members goes into the fund of the company. Each member also furnishes fuel for his threshing job, and, as the name indicates, the threshing crew is made up of the members or their farm helpers. The variations in the size of threshing jobs are adjusted by the number of helpers furnished, reckoning at a daily wage determined at the beginning of each season.

When the threshing season is completed, the secretary has a record showing the number of bushels of each kind of grain threshed for each ring member, and the number of hands each furnished at the different jobs. The adjustments of debits and credits is then a simple matter.

In addition, the ring every year, after completing the threshing for its own members, allows its outfit to work for conveniently located non-members, but the company invariably furnishes a crew sufficient to operate the engine and separator as a protection against misuse of their machinery.

Could these ring members be induced to go back to the old regime of watchful waiting for the itinerant threshing outfit and consequent wastage of grain and time? The ring refrains, when this question is put, is: "Nothin' doin'."

de of July. After this date the plants should be allowed to develop normally to make and store plant food in the roots. From this plant food the shoots and stems are produced early the following spring. If harvesting is continued too late in the season, the plants will be greatly weakened and a lower yield will be secured during the next few years.

Expert knowledge mixed with common sense makes a farming formula hard to beat.

## Live Stock Items.

The poorest animal requires the hardest selling. A good animal sells itself to a good buyer. You can not put big bones on a pig that was not born to have them. If you want big-boned hogs, breed for them.

Never pour cold water on hot hogs. Do not load hogs too closely in hot weather. Bed the cars with sand and wet it thoroughly.

Lambs for August market must find the grain trough well supplied during July. A lamb ought to gain half a pound a day in weight. Have a cow freshen about lambing time so that there will be milk for the lambs, if the ewes are short. Remember that cows carry their calves 285 days.

Thunderstorms do not cause sour milk. However, the warm temperature and high humidity which accompany thunderstorms are favorable to the growth of bacteria, which cause milk to sour. Sweating is an indication of the horse's need of water. Twice a day may be often enough to water in cool weather when horses are idle, but many horsemen consider four times not too often in August.

Early lambs are profitable when there are good markets. The breeding season for early lambs begins in July, and the lambs are dropped from December to February. Warm buildings are necessary at lambing time; build before winter.

Hogs need shade and clean water during summer. Too much direct sunlight and heat are frequent causes of hogs failing to thrive, and often cause hogs to die. During July and August small-pigs often blister on the backs and about the ears, sometimes causing bad sores.

All oads lead to railway crossings. Use precautions.

## THE CHEERFUL CHERUB

The earth just travels silently. And never gets to laugh or sing. So far from all the other stars it must be lonely, poor old thing!



## To Get Rid of Cutworms.

Last spring the cutworms cut down most of my early cabbage. One cool evening when I thought there was danger of frost coming, I took some gunny sacks and closely covered part of the ground. The next morning after sunrise I took the sacks off and found all the cutworms on top of the soil, where they were easily picked up and destroyed. I then tried the same plan on the rest of my garden, covering up all cut off or injured plants so as to exclude the light. The next morning on removing the coverings the cutworms were easy victims, there being from one to three on top of the soil under nearly every covering. The cutworms do their damage at night, coming out of the ground during the night and returning at the approach of day.

A productive orchard, a good garden, laying hens, and cows which pay their board will help make any farm a desirable farm.

## Care of the Garden in Hot, Dry Weather

When the balmy days of spring give place to the burning heat of summer, the gardener's enthusiasm is like to drop from blood heat to zero. Hot weather, if accompanied by frequent rain, is favorable for the growth of weeds, and if not accompanied by rain the result is drought. Either condition demands that the garden be frequently cultivated. To save the plant food, moisture and sunlight, which would be taken by the weeds, get rid of the weeds before they appear above the ground.

The bad effects of drought can be largely taken care of by consistent cultivation. Breaking up the surface layer of soil, with a cultivator, hoe or rake checks the evaporation of moisture by forming a fine mulch on top of the soil, and thus holds the water in the soil below. Each rain should be regarded as if it were the last one for a long time, and as soon as the soil becomes dry enough to work it should be thoroughly cultivated and a fine mulch formed on the surface of the ground. Cultivation should be repeated at least once in ten days, even if no rain occurs in the meantime. It is surprising how much drought some crops can endure if the moisture from each rain is saved by cultivation.

In spite of cultivation some crops may suffer on account of drought, especially if the drought lasts for a long time. Then it is fortunate if the garden is within reach of a water supply. Whenever the garden is watered it should be given a thorough application, enough to soak the soil to a considerable depth. Light sprinklings are of little value, since they do not reach the roots. Enough water should be put on at a time to last at least a week. Follow each application of water with a thorough cultivation as soon as the ground is dry enough to work.

Besides cultivation and watering, certain crops will need protection against the hot sun. Head lettuce, if it has not completed its growth when the hot weather arrives, should be given artificial shade by tacking burlap or muslin over a frame to shade the plants. The same frames can be used to shade late cabbage or celery plants.

To protect cauliflower heads from the hot sun, the outside leaves of the plants should be drawn together and tied at the tops as soon as the heads appear.

Tomatoes may become scalded before they ripen unless they are protected from the sun. Fruits lying directly on the ground are especially likely to be sun-scalded. Tomatoes that have been staked and tied have a decided advantage over those that

are not supported. An additional advantage of staking is that the plants can be cultivated throughout the season, and thus be protected against drought more effectively.

To have a continuous supply of vegetables through the summer and early fall it is necessary to make successive plantings. This is especially true of sweet corn and string beans.

A piece of ground should be saved for the late plantings and should be worked over with a harrow or cultivator after every rain for a few weeks before planting, in order to save enough moisture to sprout the seeds, if planting takes place at a dry time.

When planting sweet corn in dry weather, be careful to place the seed in moist soil below the surface mulch. Successive plantings of string beans may also be made if similar precautions are taken to save moisture for the seedbed. Plantings made during the last half of July are especially likely to yield good crops, because the plants will have the benefit of autumn rains when the pods are developing.

If there is an abundance of rainfall during the summer, it is possible to grow good crops of late vegetables on ground which has had an early crop harvested from it. Whenever possible this should be done, since the land is sure of being kept free from weeds if it is growing a crop of vegetables. No weeds should be allowed to go to seed in the garden, because the weed seeds produced one year result in a lot of unnecessary labor in the garden the next year.

During the summer season insects are likely to be in abundance in the garden, and they should be controlled. The insects which eat the foliage of plants, such as potato-beetles and blister-beetles may be killed by spraying with arsenate of lead. Flea-beetles which riddle the foliage of egg-plants, potatoes and tomatoes, can be controlled by spraying with Bordeaux mixture. Plant-lice, which suck the juices from the leaves of melons and various other plants, and cause leaves to curl, may be killed by spraying with nicotine sulphate or kerosene emulsion. Fungous diseases which attack the foliage of vegetables, may be controlled by spraying with Bordeaux mixture.

In a nutshell, here are the things to do in a garden in hot, dry weather: Cultivate the garden early. Water the garden if necessary and possible, but do not try to substitute watering for cultivation. Protect plants from the intense heat of the sun. Make successive plantings of sweet corn and string beans. Do not allow weeds to go to seed in the garden. Fight insects and fungous diseases.



THE WESTERN CROP. Cultivating corn a few miles south of Saskatoon.

# 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 stamped, addressed envelope is 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.

## Mouth Inflammations.

There are several varieties of stomatitis, as doctors call inflammation of the mouth. In babies, generally of 6 to 18 months, small yellowish white blisters may form—herpetic or aphthous stomatitis. This is due in most cases to uncleanliness, bad hygiene or improper feeding. The remedy lies in correcting these untoward conditions, and in proper regulation of the bowels; and mouth washes containing boric acid, a teaspoonful to the pint of water that has been boiled.

Marasmic, scrofulous or anemic children may suffer perleche, fissure or cracking or ulceration of the mucous membrane at the corners of the mouth. This is very painful on opening the mouth wide, as in yawning. The doctor may apply a 5 per cent. solution of silver nitrate, after which a simple powder (zinc oxide or bismuth) is dusted over the sores. Or a salve may be used (Bismuth, gr. 10 to an ounce of vaseline, or a 3 per cent. resorcin ointment or benzoinated zinc ointment or Lassar-paste, all to be had of the druggist).

There may be catarrhal stomatitis, of a portion of the entire surface of the mouth, during the eruption of the first teeth or by reason of uncleanliness, irritating, excessive, hot and unsuitable food, stomach and bowel ailments or fevers. The mouth is at first red, dry and hot; later there is increased flow of saliva, coated tongue, constipation, slight fever and thirst. The mouth is like to be open and there may be swellings of the glands under the jaw. This trouble may last a week during which time sucking is most painful. The child is naturally fretful, cries and perhaps

vomits a good deal. The nipple and the child's mouth must be frequently cleansed, 1-10 grain doses of calomel given daily, the boric acid mouth wash used and the causes mentioned removed. In bad cases the child may have to be fed by means of the stomach tube.

## Questions and Answers.

Question—My husband takes cold very easy and it hangs on to him so that it worries me terribly. I have wanted him to go to a doctor and get examined but he says he feels well enough only that he is terribly tired out. He has a sallow complexion. Is working nights. Now he seems to take bad coughs worse than ever.

Answer—Your husband should be thoroughly examined. Nothing is sadder than the neglect of what might be remedied until the time for a cure has passed. Night workers always make their occupations manifest to the physician by reason of their pale complexions. It is quite possible that your husband has tuberculosis. Indeed I fear so from your letter. Further information on this subject is being mailed you.

Question—What should I do to overcome an anemic condition? There are so many medicines that are said to be beneficial but I do not approve of any drugs unless they are recommended to me by a medical authority.

Answer—You are quite right. Drugs should be used only on the doctor's prescription. The leading of the healthful life, good food, attention to the bowels, the kidney and the skin are the essentials to the cure. Information on the hygienic life is being mailed you.

## The Farm Cure for Tired Souls.

I tried the life of the mill. The clatter of its wheels distracted me. I dreamed of noise and hurry and worry. There was no time for calm, quiet, clear thinking. I was one of the cogs of the machinery, nothing more.

The lure of the great office caught me. I was like a caged tiger. No one cared for me. My work was never done. The air of the room stifled me. I could not sleep and grew old and gray before my time. In an evil day I listened to the seductive call of public office. I was a slave, was found fault with, kicked from pillar to post, loaded down like a packhorse by men who had no use for me save as they could gather up a few chestnuts raked from the fire by my poor, burnt fingers.

Sore of heart I crept back to my farm. Joy came to me like a dove flying home to its nest. The flowers nodded me a glad welcome. Birds sang my tired spirit to sleep. Now there was time to think, to plan, to live and to love. The perfume of tree and field was medicine to my soul. The creatures at the barn, the horses, the cows, the sheep, even the dog, loved me. All the forces of nature were at my command. I was my own master. My neighbors loved me and I loved them. I leaned my ear down to the breast of old Mother Nature and she whispered her choicest secrets to me. I worked, I grew tired, and I rested. I was at peace with myself, my fellows and my God. I know the farm cure for tired souls.—P. V.

## Control of Currant Worms.

The imported currant and gooseberry worm, or "saw-fly," is common in some localities, and is very destructive to the leaves of these bushes. There are two broods a year, the first appearing quite early in the summer. If there is no fruit on the bushes, they may be sprayed with arsenate of lead, one pound of the powdered form or two pounds of the paste form to each fifty gallons of water.

When fruit is on the bushes, use white hellebore, which will kill the worms but will not harm people who eat the fruit. Apply the hellebore either by dusting lightly through a cheesecloth sack, or by putting one ounce in three gallons of water and applying by means of a spray pump or a whisk broom. Apply promptly when the injuries are first noticed. Unless the worms are held in check they will defoliate the bushes and ruin the fruit, and perhaps kill the bushes as well.

## Swat the Fly.

The amount of harm done to stock because of annoyance by flies is not a settled matter. However, it is an established fact that flies are a source of annoyance to animals in pasture and in the barn. Flies keep cows from pasturing, and annoy the cows, as well as the milkers, at milking-time.

There are several good fly repellents on the market, and they are effective in protecting animals from flies. It is possible to make up such repellents at home, but the home-made articles are not likely to be so effective as the manufactured ones, although they may be a trifle cheaper.

## Poultry

In hot weather all kinds of disease germs flourish and multiply rapidly and for this reason frequent disinfecting of brood and roosting coops is advised. There are many kinds of disinfecting materials, the most convenient of which are the liquid disinfectants sold for poultry purposes. These are mixed with water according to the directions on the containers and applied to coops and utensils with a spray or brush. They kill all germs which they touch, and if applied frequently, there is not much difficulty in keeping disease away.

Lice and mites if allowed to live in the coops and on the chicks soon multiply to the extent that they make life miserable for the youngsters and make satisfactory growth and health impossible. Feeding lousy chicks is the same as feeding lice and is not profitable. To kill the large body lice, any of the lice powders in general use can be used, and to destroy the little mites which live in the coops and on the roosts, in the day-time and which annoy the chicks at night, liquid lice-killers can be provided which do the work thoroughly. Kerosene is also fairly effective.

## Clean Out the Fence Rows.

On a recent little trip round my part of the country I could not help noticing that on many farms the line between adjoining fields is bad grown up to brush.

Stop and think for a moment why the brush and trees which grow along such lines do. In the first place, they take a great deal of fertility out of the soil. The roots extend far beneath the surface. This root system demands nourishment. No man who has no a row can fail to notice that the brush grown alongside are poor and well developed. The goodness is gone out of the soil into the growth. And then, in every such there is a strip of land each side the line that can not be tilled. It is practically waste land.

To clear these rows out is a hard job. The main thing, at it and do it. A sharp axe, hook and a stout sycamore are needed. Large saplings can be cut out with the tractor. The brush to make fairly sure that cut off will not grow up again after haying. The sap in the branches and trunk cutting will be practically the matter. The brush piled along the row and will help to destroy the last

The world is just waking over fact that the farmer is to life, liberty and happiness.

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