

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 it is of special interest, it will be answered by letter, a complete 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.

NEVER BURN HUMUS-MAKING MATERIAL

Too many of us are quite thoughtless about the use of fires on the farm. Fires, on the average farm, do far more harm than good.

Everyone who burns stuff in the field or woodlot does it because he believes he is destroying either weed seeds or useless rubbish. This attitude is all right, provided we revise our definition of rubbish and get a clearer notion of the methods by which weed seeds are distributed.

It is quite rare to find any amounts of weed seeds, especially of the more obnoxious weeds, still in the seed heads and up from the ground sufficiently to be burned by the usual spring fire. In fact, one of the chief reasons why certain weeds have been dubbed "noxious" is because they have developed, during many generations, the ability to survive the various adverse conditions and rough treatments to which the farmer has subjected them. Usually the amount of vegetable matter destroyed when stubble or other growth is burned over in the spring to kill weed seeds would do far greater service if plowed under to help the corn or other crop to outgrow the weeds.

Do Not Rob The Land

I have known of many cases where stubble ground which was to be put to oats or some cultivated crop was burned over for the sole purpose of making plowing appear easier! The man who robs land in that way, even if the land is his own, ought to be indicted for robbery and prosecuted to the full extent of the law! Such willful destruction of the most vital element in the maintenance of soil fertility and tilth is certainly criminal, not only against the present but against future generations. It is this disregard for the preservation and turning over of humus making materials which has done more than anything else to cause the abandonment of so many farms in older sections of the country—this is what causes the land to "run down," "run out" and become worthless for agricultural purposes until the humus is restored.

It is very fortunate that public sentiment is being educated and undergoing marked changes in this matter. Most everyone who was raised in the grain growing section of our country can well remember when it was the regular custom to burn nearly all of the stubble land, large stacks of straw, and thousands upon thousands of acres of cornstalks. Now most of us see that such wholesale destruction was sheer wastefulness.

Poultry

Every year at the beginning of winter many poultry keepers are disappointed and puzzled by the failure of apparently well grown pullets to lay according to expectation. They can not understand why early pullets that seemed to be developing nicely and showing the usual signs of being near laying should remain at that stage for weeks and sometimes for months.

Where the conditions are as described, the most common cause of deferred laying in an insufficient ration. Underfeeding in the early fall oftenest through the failure of the poultry keeper to increase the food given to pullets on range as much as is necessary to make up for diminution in the supplies secured by foraging.

Underfeeding after the pullets are put into winter quarters is usually due to excess of care to prevent them from becoming too fat to lay.

In either case the remedy is to feed the birds all that they will eat of a substantial ration, furnishing in proper variety the food elements required, taking care at the same time to provide for as much exercise as will keep them in good condition under heavy feeding.

While pullets remain on range the only changes in diet usually necessary as cool weather comes on are to increase the quantities of food given, especially corn and corn products, and if green food on the range is running short to supply what is required to make up the shortage.

It is desirable to have pullets in their winter quarters about a month before they are expected to begin laying. Moving them at that stage does not retard laying, while if they are moved shortly before or after beginning to lay the change may set them back several weeks.

Pullets that will not begin laying before winter sets in may be left in the coops which they occupied while growing as long as the weather permits them to range.

When the pullets are in winter quarters and are dependent upon the feeder for all green food and animal food as well as for grain, one of the following rations will supply the variety required. The proportions indicated are parts by weight.

Ration No. 1.
 Dry mash 3 parts
 2 parts bran
 2 parts middlings
 4 parts cornmeal
 1 part beef scrap or fish meal
 Green feed As available, in constant supply.

Ration No. 2.
 Dry mash 6 parts
 6 parts mixed feed (bran and middlings)
 4 parts cornmeal
 1 part beef scrap or fish meal
 Scratch feed 2 parts cracked corn
 2 parts wheat, oats, or barley, or mixture of the three
 Cabbage in constant supply.

Ration No. 3.
 Dry mash 6 parts
 6 parts cornmeal
 2 parts bran
 1 part beef scrap or fish meal
 Scratch feed 2 parts cracked corn
 2 parts wheat, oats, or barley, or mixture of the three
 Cabbage in constant supply.

Ration No. 4.
 Dry mash 6 parts
 6 parts cornmeal
 3 parts bran
 1 part beef scrap or fish meal
 Scratch feed 2 parts cracked corn
 2 parts wheat, oats, or barley, or mixture of the three
 Cabbage in constant supply.

Ration No. 5.
 Dry mash 3 parts
 3 parts cornmeal
 1 part beef scrap
 Scratch feed 2 parts cracked corn
 2 parts wheat, oats, or barley, or mixture of the three
 Cabbage in constant supply.

In deciding upon a ration a poultry keeper should be governed largely by the availability and cost of foodstuffs in his locality. The common grains do not differ extremely in composition and food value.

Uses for Salt.

Sprinkle a little salt in the skillet before placing the fish in it to fry and it will not stick to the pan.

Make a little salt bag and rub the griddle with it; pancakes will not stick and there will be no smoke or odor.

Cases may be prevented from burning by sprinkling a little salt in the bottom of the oven.

When grease or milk has been spilled on a hot stove the odor arising from this may be removed by sprinkling with salt.

Egg stains on silver can be removed by rubbing with a little salt and a damp cloth.

Sheep Notes

Early Spring Lamb.

Early spring lamb, as I understand it, is an animal finished in January and February, says an expert. It must be young and tender and toothsome. I breed early lambs from the meat grades. I prefer Shropshire and Hampshire ewes of good conformation and a Southdown ram. This cross has always produced a lamb of quality for me that commands a top price.

Raising early lambs is a profitable business on any Ontario farm. The lambs are finished and marketed early and the ewes are sheared during April. At that season the fleece is in first-class condition and will command a good price in the wool market. The wool helps to pay for the cost of feed, and the manure is a rich fertilizer that is worth all the straw and roughage used to make it.

I consider it costs me about two cents a day to feed a sheep, because I raise all the rations and roughage on the farm. Under my system of raising sheep, I buy the ewes at the stockyard in July, and the same animals are conditioned for market and sold the following March or April.

Indications point to high prices for early lambs this coming spring, and ewe sheep will cost considerably more than in 1916 and 1917, but I believe the price of hothouse lambs will sell in proportion to the cost of production. My method of handling sheep should appeal to the busy farmer who has limited pasture land and little waste ground. It gives an incentive to raise sheep because the system has many features that must appeal to the business farmer.

The net profit is great on the capital invested, and the work of caring for the sheep comes after the outside labor is over and the sheep are sold before the next year's work begins. The price of lamb and mutton is high, and will remain above the old figures for a long time, I am sure. The public is getting to prefer lamb to mutton, and it is up to us farmers to encourage their appetite and supply the demand.

The Dairy

"It has been clearly demonstrated that the good dairy cow is a more economical producer than any other farm animal," says Prof. E. S. Archibald, Dominion Animal Husbandman. "Not only does she actually yield more product from a given amount of feed, but she does that at the least cost and the greatest profit."

"Notwithstanding these facts, the production of milk and fat from the average cow is exceedingly low, being approximately 3,800 pounds of milk and 130 pounds of fat per annum, which in value is less than the total cost of production. Nevertheless, it has been clearly demonstrated that by better feeding and management this average may be easily increased from 30 to 80% with an increased cost of feed and labor of only 10 to 20 per cent.; the margin would be largely profit. Such an increase is not only a financial necessity but the patriotic duty of every dairy farmer."

Do not allow dirt to accumulate in the manger or under the water-bowl. It soon becomes foul and causes the animal to lose its appetite.

Delicious Dishes of Pop Corn

This year because of the scarcity of sugar we must use less for our Christmas candies. Every pound of maple sugar; honey or molasses that we use instead of white sugar means more for food for the British and French children. If we can, in addition, spread the candy we make over the surface of pop corn kernels, an even greater saving of sugar will result.

Pop corn, salted, buttered, or mixed with molasses, is a wholesome and unexpensive confection. Pop corn cake may be molded in the form of soldiers, cannon, dolls and other shapes. Fancy boxes or net bags filled with prepared corn will delight the little folk. Combinations of dried fruits and nuts may take the place of candy in filling Christmas boxes.

The following are excellent recipes:

Pop-Corn Balls

Mix 2½ cups molasses and ½ cup brown sugar, 1 tablespoon butter and 1 tablespoon vinegar and boil until it hardens when dropped into cold water. Have ready 5 quarts of pop corn, free from any imperfectly popped grain. Pour this mixture over the corn; mix well. Dip the hands into cold water and press the corn into balls.

Chocolate Pop-Corn Fudge

Cook together a pint of sugar, half a pint of milk, 2 squares of bitter chocolate, 1 tablespoon butter, and a saltspoon of salt, until the soft ball stage is reached. Then remove from fire; add a teaspoon of vanilla extract with 1½ cups of coarsely chopped pop corn. Stir until the mixture is creamy but still soft; pour into greased pan, and when it hardens sufficiently, mark into squares.

Maple Pop-Corn Squares

Boil together 2 lbs. brown sugar or maple sugar, 1 pint milk, and ¼ teaspoon cream of tartar. When the syrup makes a soft ball in cold water, add 2 tablespoons butter; stir it gently and remove from the stove; add a teaspoon vanilla; set the pan in a vessel of cold water and beat until it begins to cool. Then pour into greased, straight-sided pans, and stretch thick with pop corn, while still soft cut into squares, but cut again in the same

lines when cold. Wrap the pieces in waxed paper.

Pop Corn Cake

One quart popped corn, 1 cup sugar, ¼ cup corn syrup, ¼ cup water, 2 tablespoons molasses, 1 tablespoon butter, 1 teaspoon salt. Pick over the popped corn, discarding all hard kernels, and finely chop the corn, or put through meat grinder, using a coarse knife. Put sugar, corn syrup and water in saucepan, stir until it boils, and cook to 270 degrees F., or until candy cracks when tried in cold water; add molasses and butter, and cook to 290 degrees F., or until it is very hard when tried in cold water. Add corn, stir until well mixed, return to fire a moment to loosen it, then pour on buttered slab or tray and roll with rolling-pin as thin as possible. Cut in squares or break in small pieces. Molasses may be omitted.

Maple Corn Balls

Three quarts popped corn, 1 cup maple syrup, ½ cup sugar, 1 tablespoon butter, ½ teaspoon salt. Pop corn and pick over, discarding kernels that do not pop, and put in large kettle. Melt butter in saucepan and add syrup and sugar. Bring to the boiling point, and let boil until mixture will become brittle when tried in cold water. Pour mixture gradually while stirring constantly, over corn which has been sprinkled with salt. Shape into balls, using as little pressure as possible.

Pop Corn Fruit Cookies

Mix 1 cup each of fine-ground pop corn, sugar, and fine-cut figs or other dried fruit with ½ cup each of shortening and milk and a beaten egg. Gradually add 1 cup each of wheat flour and cornmeal, into which 1 teaspoon salt, 1½ teaspoons nutmeg have been sifted. Roll 1-3 inch thick; cut out and bake in a moderate oven.

Fruit Nut Caramels

1 cup figs, 1 cup dates, 2 cups walnuts. Wash and stone the dates, and wash figs and remove stems, and put with the nuts through food chopper. Mix together thoroughly and press firmly ¾ inch thick into a small buttered pan. Cut in squares, or shape in small balls and roll in icing sugar.

GOOD HEALTH QUESTION BOX

By John B. Huber, M.A., M.D.

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, care of Wilson Publishing Co., 73 West Adelaide St., Toronto.

Consumption—Death's direct door to most hard students, divines, philosophers, physicians, deep lovers, zealots in religion.—Old Saying.

FROM THE SECOND TO THE THIRD YEAR.

Three square meals and a little extra for baby, as follows:

Breakfast: 7 to 8 o'clock. Oatmeal, hominy, cracked wheat (each cooked 4 hours the day before they are used) served with milk and sugar or butter and sugar. A soft boiled egg, hashed chicken. Stale bread and butter. Bran biscuit and butter. A drink of milk.

At 10 a.m. the juice of one orange may be given.

Dinner: 12 o'clock. Strained soups and broths, rare beefsteak, rare roast beef, poultry, fish. Baked potato, peas string beans, squash, mashed cauliflower, mashed peas, strained stewed tomatoes, stewed carrots, spinach, asparagus tips. Bread and butter. For dessert: Plain rice or plain bread pudding, stewed prunes, baked or stewed apple, junket, custard or cornstarch.

Supper: 5:30 to 6 o'clock. Farina, cream of wheat, wheatena (each cooked two hours) from 1 to 3 tablespoons, served with milk and sugar or butter and sugar or butter and salt. A drink of milk. Stale bread and butter. Twice a week custard, cornstarch or junket may be given. Occasionally malted milk or weak cocoa.

With three meals a child has a better appetite, much better digestion and thrives far better in consequence, than those children whose stomachs are constantly working overtime. Yet some especially delicate children cannot do without a luncheon at 3 or 3:30; then a glass of milk and a biscuit or a cup of broth are right. Or a child may at this time relish instead a scraped raw apple or a pear; this is particularly judicious for constipated children. Children recovering from serious illness, will require, according to the doctor's directions, more frequent feeding.

QUESTIONS AND ANSWERS.

M. W. S.

If you will send me a stamped and

self-directed envelope I will mail you the information you desire.

Rest in Tuberculosis.

What do you mean by rest in tuberculosis?

Answer—Such a sufferer must rest. There is otherwise no hope for his emaciated body, an organism on the verge of bankruptcy. Here is, of course, a factor difficult of management especially among the poor (who furnish the majority of consumption cases), many of whom feel that they must somehow work in order to maintain themselves and their own. And yet there has to be rest, especially when there is fever; and at least until the sufferer has recuperated from the prime predisposition to this disease. For the consumption germ fattens on devitalized tissues.

The rest has got to be absolute if the bodily temperature reaches 100 degrees by the clinical thermometer; and the bed inexorably when the fever has gone above this. The rest should, if possible, be outdoors—at least with open windows. When the air is cold and the warm headgear is to be worn; or the warm headgear is to be worn; or the woolen "helmet" which comes down over the collar bone. And the footwear must be at least as ample and as comfortable as the headgear. The body must be abundantly clothed; there are sleeping bags made for such patients. The idea of sleep is involved in that of rest. Nowhere else should nature's soft nurse be so sedulously wooed. Insomnia is most exhausting in such a disease as this, when it is so necessary to conserve and build up the strength. Nor has any restorative ever been invented to compare with sleep. Insomnia, with fatigue and over exertion, have predisposed to many tuberculous. We strive to induce sleep without medication if possible; may among other ways, be induced by drinking of hot milk after the patient has been tucked away for the night.

How To Wrap Xmas Boxes.

Christmas packages are getting more attention this year than they did last. Since gifts are to be more practical and not of the decorative type the outside of the package must be decorative. For the last two or three years people have used for wrapping tissue paper of various colors, generally white; have tied a package with red, green or holly ribbon, and have thought they had solved the problem. This year gives most consider the individuality of every person to whom a gift is sent.

Again paper is scarce and every scrap to be found about the home should be utilized. Almost every household has stored away in the attic or storeroom rolls or parts of rolls of wall paper. These pieces can be used for wrapping the Christmas packages to good advantage.

For the round flat package containing some soft fabric, yellow could be used tied with black ribbon, or if necessary one could purchase raffia in various colors for a small amount, much less than the cost of ribbon, and when tying the bow a small bunch of flowers, perhaps the best ones of a spray which has been used on a hat, could be slipped in the knot. The paper may be a little hard to handle. If it is cut in shaped pieces use paste to keep it in place.

A pretty bag for a young woman would look well wrapped in paper of a Dresden design tied with light blue or green ribbon. For a man a plain brown paper tied with red or green raffia is very sensible, since a man has no use for ruffles or furbelows of any description. Bright green or yellow heads are fastened on the ends of the raffia. Most men like red and blue, and it would be a good idea to add a touch of color to the strings where it harmonizes with the wrapping. With green or red sealing wax the package is complete for the male friend or relative.

Sealing wax can be made decorative in many ways. Green or red would be the best for Christmas, and if one has nothing else to seal it with use one of the new coins, or a thimble, but much better would be a monogram. Pendant bows headed are especially suitable for children.

For the package for little folk the shape should be disguised and it should be wrapped securely. Oftentimes their little eyes light upon things which mothers think are safely hidden, and if the package is not safely wrapped the surprise is spoiled for Christmas morning. Little folk are very wise and can often tell by the shape of a package what it contains. Covered with soft green or gray tissue paper and tied with bright green or red ribbon or raffia, with two little bells tied to the bow, an especially attractive package may be arranged for the children.

Often small Santa Clauses tied on the boxes for little folk make a pleasing impression, even through the children are curious to get to the inside. With a round package wrap the crepe paper about it loosely, bring the paper to the top to form a rosette and tie with ribbon and with a spray of flowers or holly in the centre.

Horse Sense

Good Action in Draft Horses.

Size and power are of little value if the draft horse has not enough action to handle his big weight in an efficient manner.

The action of the draft horse should be bold, clean, and somewhat stylish. The feet should be carried forward and back in a straight line without paddling, winging, or other irregularities of gait. It is necessary that the feet move straight and smooth in order to get the best and greatest stride with the least energy.

Knee action in a draft horse is not important. A long stride which covers considerable ground is much more important than high knee action. Ability to cover ground is what is wanted in the draft horse.

The walk is the important gait. It should be true and snappy and have a good length of stride. The action of all four legs should be strong, and the movements of the knees and hocks free, without indication of dragging or stiffness.

Although the walk is more important from a working standpoint, it is necessary to note an animal's action in trotting because defects in action are more perceptible when trotting than when walking.

In trotting there should be a clean folding of the knee and hock, the feet being carried in a straight line. The hocks should work close together, for if they are carried too far apart it causes an unsightly bandy-legged appearance.

In many cases careful shoeing will improve the gait of the draft horse and tend to eliminate undesirable features.

Hogs

Every pen should be supplied with a box of air-slaked lime and wood-ashes, sulphur, charcoal and salt. The pigs seem to know when to take such correctives and naturally crave them. A good way to begin in the hog business is to buy one or two sows which have already been mated to a good sire. You get results that way sooner, although it may cost a bit more than to buy pigs and grow them up to breeding age.

Now is the time to get ready for early spring litters. Make the farrowing pens now if new ones are needed—spring and the last day before farrowing is not the time. Then some cold makeshift may have to be used, and a lot of pigs will be lost.

What Impertinence!

The Scotch express had just reached the junction. "All here for Edinburgh?" inquired the guard.

All replied in the affirmative except one old woman, who kept silence. After the train had started, however, she remarked, with a smile:

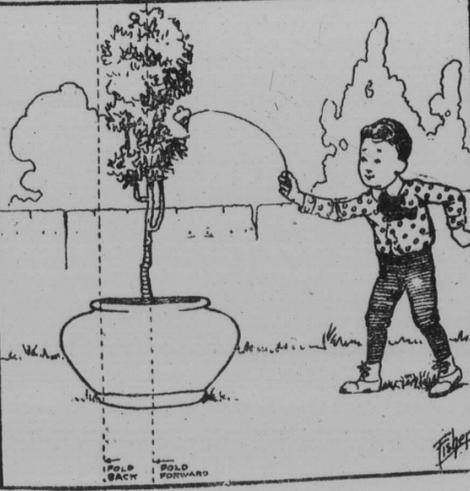
"I was just goin' to Glasgow mesel, but I wasna goin' to tell you inequiesitive mon!"

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FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



I wish I had a giant top.
 A big iron spiker in it.
 And string as long as anything;
 Oh, how I'd love to spin it.