

# Soils and Crops

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## Sheep on the Dairy Farm.

It is generally admitted by experienced flockmasters that the majority of dairy farms present ideal conditions for handling and supporting a small, but select, flock of sheep. The methods of crop growing and caring for the dairy herd furnish proper feed for the flock and, if properly housed, the feeding can be done at regular periods with practically no loss of time or labor. On many dairy farms a rigid culling of the cows, and a small band of ewes in the place of the low producers, would not only add to the profits from the business, but would aid materially in balancing the labor problem.

There are certain limiting factors in dairying, the same as in sheep raising, which for the most part make it unprofitable to extend either, or both, beyond certain limits. These limits are stable room, labor, and grain feeds for the dairy herd; pasture land, parasitic infection, woven wire fencing and waste feeds for the sheep.

Dairy cows require a vast amount of labor and considerable grain feeds. Sheep make good returns with the least amount of labor and have the ability to make profitable use of rough feeds with small quantities of grain. Dairy cows require expensive barns and sanitary equipment to give a product adapted to the trade. Sheep thrive remarkably well in open sheds, and it is to them that we can turn for the most profitable marketing of the surplus foddery and silage. For the one hundred and fifty-acre dairy farm forty ewes make a good average flock to carry from year to year. A few less cows and more sheep could be made profitable on thousands of our Ontario dairy farms.

The selection of the breed is of small importance compared with the other problems of handling the flock. At the present time the flock that will furnish a few good lambs and yield profitable fleeces of wool will give the most profit. If some particular breed is the most popular in the community, for many reasons it would be advantageous to select ewes of that breed for foundation stock. One might just as well suit his fancy in the matter of breed right at the start because he can do it cheaper then than he can shift over a few years later. When prices are right, or when he can make a good deal in picking up a few uniform, thrifty, well grown ewes, he should not hesitate to make the start. The main object is to get ewes of as uniform a type and size as possible so that better advantages of marketing

can be obtained when a mixed flock is kept.

The first step toward fitting the farm for sheep raising will be to inclose some of the fields with sheep-tight fences so that the ewes will have abundant range to gather an adequate supply of feed. As soon as practicable, fences should be provided so that the ewes and lambs can clean out the fence rows, glean the stubble fields and convert the aftermath of the meadows into profitable wool and mutton. Farms that support sheep are remarkably free from weeds. Sheep not only clean up the fields and fence rows, but, if allowed to range over the pastures grazed by dairy cows, they will clean up the undesirable weeds and grasses in a way that could not be equaled with other kinds of stock. Some of the most foul pastures have been greatly improved by allowing sheep to graze alongside of the cattle at frequent intervals during the grazing season.

The kinds of hay, grain and fodder crops grown on the dairy farm provide an excellent ration for the sheep. A small field of rape for fall grazing will give the ewes and lambs that are to be fitted for market a good start and prepare the breeding ewes for the mating period. As far as possible it is advisable to allow the sheep to harvest their own feeds.

The feeding of a small amount of silage has solved the difficult problem of bringing the pregnant ewes through the winter feeding period without the use of roots. Silos are an essential part of the equipment of all well-managed dairy farms. This is also another reason why the dairy farmer can produce wool and mutton at a profit.

With good dairy buildings it is an easy matter to provide open sheds for the sheep, and in case of severe weather during the lambing period space can be provided in the dairy barn for a few of the ewes to drop their lambs. Of course, such an arrangement means a lot of extra work for a few days at lambing time, but few of us can get along so as to avoid some of these little troubles in handling our cows and other farm stock. In fact, if sheep are worth keeping on our farms they are worth this small amount of trouble for a few days during the lambing season. The main problem is to regulate the number of sheep kept on the farm and plan the mating season so as to minimize these troubles during the lambing period. A small flock of well-bred sheep on the dairy farm can be made to pay fine profits, while a large flock may prove a losing proposition.

## Poultry

Clean eggs only should be selected for putting down in water glass. Never wash them, as this removes some of their natural protective covering.

Perfectly fresh eggs often get a "black eye" on the market just because they are not clean.

A fat chicken is always desirable and full plump body and limbs will go a long way toward finding a customer. Most of the chickens sent to market are lean and lanky.

Hens know more about bringing up chicks in five minutes than we do in six weeks. Lots of folks worry so much over their chicks that they do not leave anything worth while for the old hen to do.

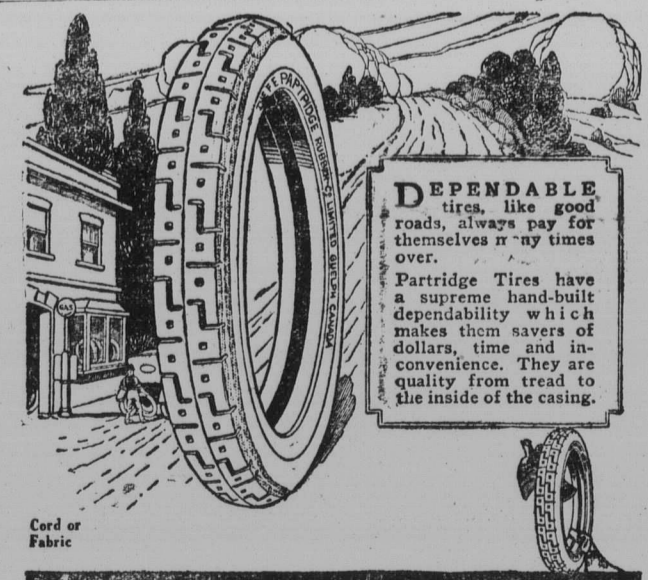
Eggs kept more than two or three days should be turned daily, as the yolk may gravitate to the lining membrane and adhere to it. As the shells are porous, do not let the eggs be exposed to steam or strong odors. Neighbor's chickens may get the

notion of coming over the fence to pick up garden stuff. Do not get all sweaty about it, and throw stones, and threaten to sue the folks across the line. They do not want their chickens to do that. Just speak to your neighbors in a kindly way about it. Smile a little bit and say: "I think you will be glad to know about it." Then smile some more and let it soak in. That generally puts a stop to it.

### "So Near and Yet—"

On a summer day when it's scorching hot  
And I'm out in the sizzling field;  
And the sun beats down from a cloudless sky  
Like a red-hot copper shield;  
When I'm wringing wet with a scalding sweat,  
'Tis then that I think all day  
Of that swimming pool, so nice and cool,  
Just 'leven miles away!

Drain the wet field that has been causing trouble and poor yields.



**PARTRIDGE TIRES**  
Game as Their Name

## Financial Notes

Halifax—Twenty-five million feet of lumber, in round figures, bought by British interests, is stored at various points along the railway lines of the Province, awaiting shipment to England.

Victoria—The official report for last year of the Minister of Mines shows a production of \$33,296,313, as compared with \$41,782,474 in the previous year. Coal last year was valued at \$11,337,000.

Allenby, B.C.—The Canada Copper Corporation is stated to have spent in the neighborhood of \$4,000,000 preparatory to carrying on extensive mining and milling operations at Copper Mountain. Some \$2,600,000 has been spent in prospecting, developing, construction and equipment work at the Copper Mountain mines and a very large sum in building the concentrator. The latter is located four miles south of Princeton on the Copper Mountain branch of the Kettle Valley Railway; and as at present erected will mill 2,000 tons per day. It is expected to reach 3,000 tons per day before the end of the present year and later will be increased to 5,000 tons daily. The concentrator is 320 feet long by 207 feet wide and is equipped with most modern machinery.

Active work at Allenby began in the Spring of 1918. Roads had to be constructed, houses and mill buildings had to be erected. A large pumping plant was built and other mill buildings promptly installed with the most modern machinery. Some \$1,300,000 was spent alone at Allenby and large sums elsewhere.

Copper Mountain contains large lenses of low grade ore, averaging 1.74 per cent. copper. To date 10,000,000 tons of ore has been proven and 2,000,000 tons semi-developed. All of the proven and semi-developed tonnage is situated higher than the lowest tunnel level, which means that all of the ore will be run by gravity instead of being hoisted out of the mine, nor will any

water have to be pumped to the mine.

The most modern machinery and equipment is expected to result in big profits for the Canada Copper Company at Copper Mountain and Allenby.

## Name Your Farm.

Every farm should be named. The matter of picking the name is something that bothers a good many. I know one neighbor who was looking for a name until he moved off the farm, but he never could decide on anything suitable.

I had that job two years ago. The farm was situated on a little jog in the macadamized road that runs by our house. The jog is probably 400 feet. Finally that occurred to me as the fitting name—The Jog Farm—and I am working around the place in touring time I hear the remark so often, "Well, that farm is named right, isn't it?" The name "Jog" also suggests the very opposite of laziness, as a real farmer to-day must eternally be on the jog.

Another thing—this farm name is distinctive. There is no other farm named this so far as I know. There are dozens of Shady Oaks, River Views, and so on; but when one sees this name he will remember it. So far, I am not able to realize on this name, but the time will soon come when I can. The stock and produce we have to sell will come to be known by the farm name as much as by my own appendage. Folks who go by see the chickens or stock, and remember where it is by the peculiar crook in the road, and the farm so named. Already I get two or three letters a month addressed to the farm name alone.

Select a name that is different. Make it mean something peculiar to your farm. You can do it. It may take a few months to locate it, but it is there.—Earl Rogers.

Thin the fruit on the apple trees. Pick off every little, imperfect apple. This takes grit, but it pays.

## The Co-operative Threshing Outfit

In many farming communities, more particularly in some of the older agricultural regions, where small grain crops are grown as a complement to dairying, stock raising and other types of farming, the small threshing outfit is gaining in popularity. The demand for small separators, which may be moved easily from farm to farm, set in place quickly and furnished with power from a farm tractor, is increasing rapidly, and the season of 1920 promises a still greater demand for these machines.

The farmer has been relatively slow to figure the investment in farm machinery from an economic standpoint, but since labor charges and the cost of operating highly specialized machinery have reached such high levels, he is beginning to discover that some of the modern mechanical inventions as well as many of his old-fashioned methods of doing work by hand do not fit in well with present prices and labor conditions. Time compels constant changes in all things, and threshing is no exception.

On farms where a large acreage of grain is seeded and plenty of help is available, the threshing outfit with a large capacity will thresh at a much less cost per bushel than the smaller rigs. If, however, the acreage of grain is small and help is scarce the conditions are reversed. Large separators with plenty of power are not likely to be overcrowded; and the waste of grain is less than is the case when the threshing is done with a smaller machine and a large crew. When grain is a little damp, or if wet bundles are found in the stack, the large machine handles them with less danger than the smaller separator. Many farmers who lack conveniences for boarding extra help prefer to pay more money and have their work done as quickly as possible; consequently they prefer to use the larger outfit and shorten the stay of the threshing crew as much as possible.

**Advantages of Small Outfit.**  
During the past few seasons the threshermen who have carried a full crew for large rigs have found it necessary to raise prices to a figure so high that many farmers have figured it more profitable to get together and buy an outfit of their own. In most cases some one of the group has owned a tractor capable of furnishing belt power for a small separator; and for that reason a small machine has been purchased. This has made it possible for them to partially overcome the shortage of help and to get their grain threshed at the proper time. As the demand for help is most acute at the season when the commercial thresherman is busiest the owners of these small outfits can plan their work so that it will conflict as little as possible with the other activities of the farm. Another advantage of the smaller outfit is the fact that the work may be done without interfering with the regular chores of the farm. When much live stock is kept it is practically out of the question to get to his neighbor's farm early enough in the morning to take his place in the crew needed to operate the commercial rig that is threshing by the bushel and running the full ten hours. Likewise, his horses are sure to suffer from neglect if he is forced to stay late enough in the evening to put in the full ten hours. This has made it necessary for operators of large machines to raise their prices per bushel in proportion

to the troubles they have had in running full time to full capacity.

With a large custom outfit the owner cannot afford to run short days, but must run early and late, oftentimes threshing when the grain is hardly in condition to thresh. With a small machine and tractor owned by several neighbors this situation is avoided, as they can do their chores as early as convenient in the morning and get the work started by the time the grain is in fit condition to thresh. In the evening they can quit early enough to do the chores without interfering with anyone.

**Loss Through Delay.**

In many localities where farmers depend upon one custom outfit there are many who have had disheartening experiences in failing to secure a rig at a time when it was needed, and as a result have lost considerable grain. Probably the greatest factor that has contributed to the popularity of the small machine is the fact that the owners do not have to delay threshing when the grain is ready to thresh. In many instances this means a decided saving of grain; besides the owner can plan the storing of his grain and straw so that there will be an immense saving of labor in feeding his stock and getting his other crops under cover. If a large custom rig is depended upon to do the work he must wait his turn, though his grain may be ready weeks before the machine could get to his farm; and in bad weather much good grain might be lost; whereas, if he had an interest in a smaller outfit, he could thresh as soon as the grain was fit, then if bad weather came he would not be compelled to neglect his farm work to help those with whom he changed work. This condition is more common where farms are small and where more of the land is devoted to pasture and cultivated crops. In such localities the jobs are smaller and the larger machines must do the work at a decided disadvantage.

All arguments, however, are not in favor of the small separator. In many cases it is operated by a man who has little knowledge of machinery; consequently there is likely to be considerable breakage. Another factor which must be considered is that the cost per bushel is comparatively high when the machine is used only a few days in the year. However, if it is securely housed, and operated by a man who has had some experience with machinery, these factors are not sufficient to discourage its purchase and use. Interest, depreciation and cost of shelter are always a fixed cost, and when they are distributed on the bushel basis, the fewer bushels of grain threshed each year, the greater will be the fixed charges per bushel. It is always necessary for one to decide whether or not the advantages to be gained from its use will be sufficient to offset the waste of grain and the higher cost of custom threshing.

**Factors in Success.**

An important factor in the smooth and successful operation of a threshing rig is to have the work done on a business basis. To have the average day's work consist of so many bushels of wheat or oats. To keep a record of the time put in by each member or laborer and to have the costs of the work properly distributed among the members so that each one shall be charged on the basis of the amount of service performed on his farm.

## THE SUNDAY

THE SUNDAY SCHOOL LESSON  
AUGUST 22ND.

A Prayer for Pardon, Psalm 51: 1-17.  
Golden Text—Psalm 51: 2.

1-4. Have Mercy. It is only in God's gracious loving kindness that he has hope. God's kindness has been known through past experience. His tender mercies have been abundant and manifold in the experience of His people. It is according to that kindness and those mercies that he now hopes and prays forgiveness may be granted. The first words might be rendered, "Be gracious unto me." He casts himself on the divine grace as the only power which can set him right. "Blot out, wash, cleanse, are the words which he uses for the forgiveness which he seeks from God. As debt is wiped away or blotted out, as garments are washed clean from filth, as leprosy is healed and cleansed from the body, so would he be pardoned and made clean. His penitence is sincere and deep, and he makes confession. I acknowledge my transgressions, he says, and my sin is ever before me. Moreover, in the searching light of his consciousness of the divine Presence he sees his sin before all else in its relation to God. Against thee, thee only, he confesses, have I sinned. For he is made to feel very deeply and really that a sin against his fellow man is a sin against God. Compare 2 Sam. 11: 27; 12: 9. Therefore God is justified in condemning men for all sins against the common laws of humanity, whether they be sins of lust, or of cruelty, or of violence, or of fraud.

5-6. Shapen in Iniquity. The poet confesses that his sin is not simply a wrong act, a transgression. It is something deep-rooted in a corrupt nature, in an evil heart. Far from being an excuse for sin, this seems to him to make it all the worse, and therefore the remedy for sin must also go deep, and heal and cleanse the whole nature.

7-9. Purge Me With Hyssop. Hyssop is a fragrant herb, "a kind of wild marjoram with an aromatic flavor, possessing straight, slender, leafy stalks with small heads, growing so that a bunch could readily be broken off and used for sprinkling." It was used at the passover for dipping in the sacrificial blood and sprinkling with it the lintel and side posts of the doorway (Exod. 12: 22), and for sprinkling the leper "in the day of his cleansing" (Lev. 14: 1-7), and other ceremonial purifications (Heb. 9: 19).

## Garden Hints.

Start geraniums during August for winter blooming.

Strawberries, if started in August, may produce a small crop the following spring.

Seeds of larkspur, pansy, columbine and hardy chrysanthemum may be planted out-of-doors in August. This will save a year of waiting for them to bloom. Most of these, and other perennials, will bloom next year.

For cabbage-worms: Mix one part of Persian insect powder with four parts of air-slaked lime and dust it on the plants.

Weevils can be killed in beans and peas by the use of carbon bisulphide. To treat these put them in a jar, tub or other vessel which can be covered tightly. Put into a glass about one teaspoonful of carbon bisulphide for

each ten gallons of space in the enclosure and place the glass in with the beans. Allow them to remain in the fumes of the carbon bisulphide over night, then take them out and place in dry storage quarters. Do not take lamps or lighted matches near the material, and do not breathe the fumes.

Use a good spray to protect the cows from the flies.

On a good many farms there are old barns or other buildings that are empty. On these same farms, high-priced machinery may be standing out. By tearing down these out-of-date buildings, moving them to the right place and rebuilding them according to the needs of the place, we have protection for all the binders, plows, mowers and so on. Make money-savers of these old barns.

Thomas Carlyle wrote of David's sin and repentance, as reflected in Psalms 32, 51 and elsewhere, as follows: "David's life and history, as written for us in those Psalms of his, ever given us of a man's moral progress and warfare here below. All earnest souls will ever discern in it the faithful struggle of an earnest human soul towards what is good and best. Struggle often baffled, sore, baffled-driven as into entire wreck; yet a struggle never ended ever with tears, repentance, true unconquerable purpose, begun anew."

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## Welfare of the Home

### Meals for Children Under Six.

These meals for the pre-school child are suggested for normal children, who are not under a doctor's care. Although they are not intended to be taken as law and gospel, they have been worked out carefully and should serve as a valuable guide to the young mother.

If a child who is regularly and properly fed has a poor appetite, there is very possibly something wrong with it.

Children often cultivate a finicky appetite, however, especially if they are encouraged to be "choosy" about their food. There are very few things which a child really dislikes and the mother will save herself no end of trouble if she insists from the beginning that he eats whatever he is given, so long as it is well cooked, properly seasoned, and wholesome. If he already has the habit of refusing certain foods which are good for him, the simplest way to break him of it is to let him get hungry enough so that any of them will taste good to him.

**From 18 Months to 2 Years.**

Breakfast, seven a.m.—Fruit, as juice of one orange; pulp of six to eight stewed prunes; pineapple juice two or three tablespoonfuls.

Cereal, two or three tablespoonfuls, with milk.

Bread, 24 hours old, toast or zwieback, with butter.

Milk, one cup, warm or cold.

Lunch, eleven a.m.—Glass of milk, with bread 24 hours old, toast or zwieback and butter.

Dinner, two p.m.—Broth, thickened with peas, sago, rice, or barley; or vegetable soup and milk; or beef juice, with bread crumbs; or soft-cooked eggs, or poached egg, with toast.

Vegetables, selected from baked or mashed potatoes, squash, cooked celery, mashed turnips, or carrots.

Bread, 24 hours old, white, or whole wheat, or graham, with butter.

Apple sauce, or prune pulp, one tablespoonful.

Supper, six p.m.—Macaroni, boiled

rice, custard, or junket, one tablespoonful.

Bread, 24 hours old, or toast with butter, two slices.

Milk.

Baked apple, apple sauce, or stewed prunes.

**From 2 to 3 Years.**

Breakfast, seven a.m.—Fruit, as half an orange, six or eight stewed prunes, pear or peach pulp.

Cereal, three or four tablespoonfuls with milk; or egg, soft-cooked or poached.

Bread, white, or whole wheat, or graham or toast, with butter.

Milk, one cup, warm or cold.

Lunch, eleven a.m.—Glass of milk, with bread and butter, or graham or oatmeal crackers.

Dinner, two p.m.—Broth or soup.

Meat, as, fine cut beef, lamb, or chicken; or fish boiled.

Vegetables selected from potatoes, fresh peas, fresh beans, spinach, asparagus tips, cooked celery, squash, mashed turnips, or carrots.

Bread and butter.

Junket, or custard, or blancmange.

Supper, six p.m.—A cereal or egg (if not taken for breakfast); or custard; or milk toast, or macaroni.

Bread and butter.

Stewed fruit.

**From 3 to 6 Years.**

Breakfast, seven a.m.—Fruit, as oranges, apples, pears or peaches.

Cereal.

Egg, soft-cooked, poached or scrambled.

Bread or toast and butter.

Milk or cocoa.

Dinner, twelve noon.—Broth or soup.

Meat, as beef, lamb, mutton, or chicken; or fish, boiled.

Vegetables, except corn, cabbage, cucumbers or egg plant.

Bread and butter.

Simple puddings or custard.

Supper, six p.m.—Rice, or macaroni, or soup, or cereal, or milk toast, or thick soup, or corn bread.

Fruit, or custard, or junket.

Milk, warm or cold, or cocoa.