Soils and Crops

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Cheaper Haying and Harvesting.

There are three ways in which any farmer can do his haying, harvesting and threshing cheaper. He can use better methods, do away with poor management, and use the right implements or machinery.

To hitch those generalities to hard facts, take the matter of waste labor. Much labor is absolutely wasted in haying, harvesting and threshing. Many farmers believe that at haying time it is necessary to hire a bunch of extra men to get the hay into the barn. This may be true on some farms, but not always. The most successful farmer in our neighborhood never hires extra help at haying time, and he and his fifteen-year-old boy put up fifteen or twenty acres of timothy and clover every year. Sometimes hay-making is saddled on to the end of corn plowing, but that never seems to make any difference. Here's how he manages:

In the morning he cuts down several loads of hay. An hour or so later he goes over the hay with a tedder to "kick" the water out of it. By the middle of the afternoon the hay is ready to load. A hay-loader is hitched behind the wagon, the boy drives, a load is soon put on, and it is put into the barn with a hay-fork. The boy drives the team to the fork, while his father sticks the fork and trips the load in the barn. A little head-work enables them to put up in the afternoon all the hay cut in the morning. When the barn is filled, the same plan is used for cutting and tedding, but hay is drawn to the stack with a sweep-rake and thrown on the stack with a ricker. The boy runs the rake and his father does the stacking. If a stack must be left open at night, it is covered with waterproof duck.

Mowng machines that cut a wider swath will cut the cost of hay-making on some farms. The five-foot cut is a common size, but six, seven or even eight-foot mowers may be used to good advantage, if time is any item. For instance, under average conditions, a five-foot mower will cut ten acres in ten hours; a six-foot mower will cut twelve acres; a seven-foot mower, fourteen acres; an eight-foot mower about sixteen acres. More power is required for the wider cuts. Many alfalfa growers are using the eight-foot cut with good success, and make a practice of mowing early in the morning before the dew is off, or even during a light rain. It is not necessary to wait until the dew is off before starting the mower, if the tedder is used. The size of mower used and the time of day it is started are important, especially when hauling is done only in the afternoon. The tedder and rake are big helps in making hay with a small crew.

In harvesting, as in haying, a great deal of labor is often lost. The biggest waste generally comes because the harvester is not put in repair until pulled into the field. Then every bearing must be oiled, the sprocket chains must be put on, the canvases must be put in place, and the tying machinery must be adjusted. My, what a waste of time, on a day when grain is ready to be cut!

Shocking grain is a job for extra help. In the last few years, though, this extra help is needed less and less because of a shocking attachment for the binder, which does the shocking.

Twine for binding grain is quite an item of expense, and it is getting more common for farmers to put their orders together and buy at wholesale, at a saving. One thing to remember in such buying is to give the local twine dealer a chance to bid on the order.

Stacking grain, ordinarily, cuts down the amount of labor and teams needed at threshing time. The stacking can be spread over several days, and requires only the help of the regular hired man, or a boy. Stacking also leaves the stubble clear for plowing right after harvest, which not only saves moisture, but helps to control Hessian fly. Wheat threshed from stacks is generally of better quality.

When threshing from the field, costs can be cut by using one-man bundle wagons. By use of these, one man is able to haul a load of grain from the field in almost as short a time as two men ordinarily require. Temporary wide-end ladders and side fences are put on the hay-racks before threshing tme, and these do away with an extra man to place the bundles on the load. The community use of the one-man rack, coupled with the co-operative threshing ring, seems to make an ideal combination for reducing the worries and costs of threshing from the field.

In threshing, there seems to be quite a saving in the use of smaller threshing machines for the use of single farms, or for two or three farms. The use of these smaller machines, which can be run by a gas engine, electric motor or tractor, does away with no end of teams and hands, exchange of labor, and days of cooking and stewing for the women folks. Moreover, the time of threshing can be arranged more nearly to suit the farmer's convenience. In a large threshing ring of twenty-five members, the first man's grain is pretty likely to be threshed before it is ready, and the last one, when the season is rainy, is likely to have a great deal of sprouted or mouldy grain.

It does not take an expert thresherman to run a small threshing machine. The thing to do is to follow instructions in the manufacturer's book. Each man who has a share in a small thresher should have a copy of the book, and not make adjustments unwisely.

Finally, watch the straw-stack. Often more than one man's profits go into the stack because of a poor separator, or a good one improperly adjusted. See that the threshing machine is equipped to put all the grain into the grain wagon, and only the straw and chaff in the stack.

Poultry

A good ration for young ducklings is a mash made of two parts cornmeal and one part bran, to which is added a sprinkling of grit and five per cent. beef scrap. They should have plenty of green food, such as lawn clippings or vegetables, and given a range where they can gather green food. Give fresh water in dishes deep enough so they can cover their nostrils with water when drinking.

Shade should be provided for ducklings. A lack of protection from the hot sun causes severe losses during the summer. The old ducks can be given a ration of equal parts of bran, cornmeal and boiled vegetables, and ten per cent. beef scrap. The mash is usually given at night and morning. A scratch grain of either cracked corn or wheat and oats can be given at noon. During the laying season a good ration for breeding ducks consists of equal parts of low-grade flour, bran, cornmeal, vegetables and twelve per cent. beef scrap.

A good range is rather essential if ducks are raised at a moderate cost. A small body of water is helpful because of the natural food of ducks, such as grasses and insects which will be found in such a place. Water is not necessary, however, except that it must be supplied abundantly for drinking purposes.

The easiest way to raise a calf is by feeding it whole milk. This probably will produce the best calf, but not necessarily the best dairy cow. Feeding skim-milk to the calf after it has secured a proper start may give as good a cow as the feeding of whole milk, but the process requires greater care.

For the first few days, the calf should run with its mother, after which it should be removed and fed warm fresh whole milk by hand. This should be continued for ten days or two weeks at least. The length of time it should be continued depends upon the vigor of the young animal. From ten to twelve pounds of this milk should be fed per day, in three feeds at first, but this number may later be reduced to two.

The skim-milk is then introduced gradually and a period of about two weeks should be required before the calf is placed entirely upon its new feed. The skim-milk should be sweet and warm when fed. Cold sour milk is the greatest cause of scours. Continue the skim-milk for at least five months and it may be fed for six or seven months, depending upon the supply. As soon as the calf is old enough to eat substitute feeds they should be given.

What Trees to Plant.

For Ontario conditions the following tree-planting guide is offered as regards selection of trees to suit local soil and moisture conditions:

Good sandy loams—Sugar maple, black walnut, pin oak, white ash, red oak.

Good medium loams—White ash, white elm, sugar maple, black locust, black walnut, butternut, soft or silver maple, white oak, native plane, Oriental plane, native basswood, Norway maple, red oak.

Good clay loams—Soft or silver maple, white elm, white ash.

Low-lying wet soils—Soft maple, pin oak, native basswood, white elm, native plane.

Swampy conditions—Native willows and native poplars, pin oak, if condition is not too bad.

Missing.

"Children" said the Sunday school teacher, "this picture illustrates today's lesson: Lot was warned to take his wife and daughters and flee out of Sodom. Here are Lot and his daughters, with his wife just behind them; and there is Sodom in the background. Now, has any girl or boy a question to ask before we take the study of the lesson? Well, Susie?"

"Pleathe, thir," lisped the youngest in the class, "where ith the flea?"

Some conception of the magnitude of the canning industry in British Columbia may be obtained from the fact that 10,000 tons of Welsh tinplate has just been received for the season's trade.

School Fairs and Home Garden Contests Ontario---1922

School fairs have had a wonderful development in Ontario during the past few years. Their popularity does not seem to be waning in the least and it is a particularly encouraging sign to see the deep interest that is developing from year to year amongst the local people.

The growth of the movement can best be gleaned from the following figures given in approximately seven-year periods:—

By R. S. Duncan, B.S.A., Director, Agricultural Representative Branch.

	1909	1915	1921
Number of School Fairs held	1	234	449
Number of schools included	3	2,291	3,847
Number of children taking part	58	48,386	95,307
Number of home plots	58	51,243	114,216
Number of entries made at the fairs	174	116,236	193,545
Number of children attending fairs	80	72,860	154,831
Number of adults attending fairs	170	84,406	188,728
Total attendance at fairs	250	157,266	343,259

This is truly a phenomenal growth, and it is the desire of the department to extend from time to time this form of education to all the rural schools in the province in order that all school children may enjoy its benefits.

During the past season, the Ontario Department of Agriculture, through the Agricultural Representatives, distributed to the boys and girls enrolled in the School Fair movement the following qauntities of seeds and eggs:

Potatoes	1,039 bags
Oats, barley and wheat	252 bush.
Peas and corn (sweet and field)	24,100 pkgs.
Beets, carrots, onions and parsnips	42,000 "
Mangels and turnips	12,800 "
Asters, phlox, sweet peas and cosmos	30,750 "
Eggs, bred-to-lay Barred Plymouth Rock	10,852

Each School Fair is carried on by a board of directors composed of representatives from the school, the Agricultural Representative acting as manager. In most cases the Representative is assisted by a local committee representing the teachers, trustees and parents, and where we have an active committee all pulling together, there is no weak link in the chain.

One of the greatest handicaps to better work is the annual change of teachers, but this is gradually being overcome because many teachers have had more or less experience with school fairs even before they graduate from the Normal schools.

It is very gratifying to report that the quality of the exhibits is improving from year to year. The pupils are gradually learning that it does not pay to bring anything but "good stuff" to the fair. The judges are requested to point out by comparison the difference between the exhibits awarded first prize and those awarded second, third, fourth, fifth and sixth prizes. Besides giving reasons for their placings, the judges try to point out to the exhibitors and others the desirable type, what constitutes quality in the various classes called for on the prize list, and to offer hints or suggestions as to the preparation of exhibits. To my mind this is one of the greatest educational features of the school fair.

District championship School Fairs were held during the past season in the following counties: Frontenac, Halton, Norfolk, Oxford, Welland, and Wentworth, and Rainy River and Manitoulin districts. The first, second and third prize exhibits from the various school fairs in the county or district were eligible for competition, the agricultural society supplying practically all the prize money.

Championship fairs are feasible only where it is possible to conduct the school fairs sufficiently early in the season to allow prize exhibits to compete at the place where the championship fair is held and where transportation facilities are sufficient. Boys and girls take a great pride in winning a championship ribbon, and the quality of the exhibits is reflected in the local school fair. The championship goal seems to be an added stimulus. The exhibits staged at these championship fairs were not only a credit to the pupils but also to the district from which they came. The pupils are "broadening out," and they are gaining a wonderful experience which will have its effect upon the larger fairs in the future.

During the past two or three years, there has been an agitation on the part of the officers of some agricultural societies to have the school fairs linked up with fairs held under society auspices. Those favoring the holding of joint fairs put forth the argument that there would be less duplication of work and effort and the combined fair would be more successful. This scheme has had a fair trial, and about the only thing to commend itself is the fact that the gate receipts are greatly increased. The greatest objection to holding joint fairs is the fact that in the great majority of cases there are too many counter-attractions and difficulty is found in carrying out the well-arranged program for the entertainment and especially the education of the children. With this plan, the school fair would more or less lose its identity and defeat some of the objects for which it was originally formed, namely, to give inspiration and create greater interest, broadly speaking, in agriculture.

The department feels that school fairs should be held separately and distinct from county or township fairs. In some communities, however, the local people feel that the two can be combined quite nicely, and in order to guard against the objections raised, the department insisted that where the fall fairs held under the auspices of the agricultural societies and the school fairs are conducted jointly the following conditions must be complied with:—

1. Prize List—That the list of classes for the Rural School Fair, prepared by the Agricultural Representative and the Rural School Fair Association, be included in the regular prize list of the Agricultural Society.

That one copy of this prize list be distributed to each pupil or one copy to each family or household in the Rural School Fair Association.

That the prize list be issued not later than June 1. Where it is impossible to issue the regular Agricultural Society Prize List by this date the Society should issue a separate School Fair prize list for early distribution.

2. Finances.—That the Agricultural Society supply half the prize money, such sum not to exceed $75, for these classes and that the sum be paid in cash to the manager or secretary of the Rural School Fair Association prior to the fair.

3. Accommodation.—That the Agricultural Society supply suitable building or tent accommodation for displaying the pupils' exhibits, together with tables and poultry coops, and have same in readiness the day previous to the fair. Where this equipment is supplied by the Department of Agriculture, the Agricultural Society must pay transportation and cartage charges, and furnish help to erect the tents.

That suitable field accommodation, properly enclosed, be definitely assigned to the Rural School Fair for the purpose of holding sports, parades, judging of live stock.

That a program for the day be decided upon by the Agricultural Society officials and Agricultural Representative to avoid clashing of events.

4. Admission.—That all pupils and teachers in the schools taking part in the Rural School Fair be given free admission to the fair.

5. Judges.—That the Agricultural Society supply judges for exhibits such as poultry, live stock, vegetables, grains, etc., satisfactory to the Department.

6. Protection. (Constables).—That the Agricultural Society supply protection for Rural School Fair exhibits.

New Features.

A successful school fair must have something new and worth while each year. The pupils demand change in order to keep up interest. Sports are merely an added attraction. Last year many Representatives conducted some competition that was entirely new to the children, such as judging competitions for teams of three boys in live stock, and for three girls in sewing or darning; individual competitions in naming weeds, apples, vegetables, and live stock, the latter from pictures; chicken plucking, boys' riding, girls' hitching and driving, public speaking and singing competitions and Strathcona Drill and school fair parade. Not all of these contests can be carried out at any one fair but a few new "stunts" each year add interest and keep up the enthusiasm of the children.

The Home Garden Contests.

The Home Garden contest is primarily intended for the teen-age boys and girls on the farm. Sufficient seed is given each contestant to plant a plot 30x40 ft. The crops grown are as follows: tomatoes, corn, cabbage, peas, beans, onions, radish, lettuce, parsnips, beets, carrots, Swiss chard, cucumbers, squash, citron, and spinach.

A special pamphlet, showing the crop arrangement, plan of garden, and giving cultural instructions is handed each contestant. Each contest comprises 25 gardens. During the past season the competitiors paid the cost price of the seeds, namely 75 cents, and in all there were 75 Home Garden contests, including 1,875 pupils.

During the months of July and August, the Agricultural Representatives inspected the gardens and awarded prizes for the best gardens. In addition, special prizes were offered at the school fair and local fall fair for exhibits of vegetables from the home gardens. Last year competitors were required to can products from their gardens and exhibit these at the fairs along with the fresh vegetables. This year it is planned to make canning optional.

The object of these Home Gardens is to interest boys and girls in better agriculture and encourage the use of more vegetables in the farm home. It is truly surprising what can be grown in a small garden, and after allowing the family free use of the vegetables grown many of the boys managed to dispose of the surplus products and made a little "pin money." They were thus able to thoroughly enjoy spending a little money earned by the exercise of their own skill. These early lessons in finance should stand them in good stead.

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OLD
CHUM
The Tobacco of Quality
1/2 LB. TINS
and in packages

Tested New Kinds of Grain.

Sixty-nine new varieties of grain have been tried out at the farms and stations of the Dominion Experimental Farms system. These are briefly described in Pamphlet No. 11, of the Department of Agriculture, Ottawa, by Dr. C. E. Saunders, the Dominion Cerealist. The varieties include three of winter wheat; fifteen of spring wheat, late and early ripening; twelve of oats, main crop sorts, early and hulless varieties; seventeen of barley, six-row kinds, two-row kinds, hooded kinds, and hulless; two of winter rye; two of emmer and spelt; nine of field peas; four of field beans; three of flax for seed, two of flax for fibre, and three of buckwheat. In addition, recommendations are given to varieties best suited for the different provinces, thus greatly enhancing its value.

In his introduction, Dr. Saunders points out that while, as a rule, it is wise for growers to leave the testing of new varieties to the government farms and stations, those who have a liking for the work will find it extremely interesting, though expensive. Apart from that, there will always be plenty of scope among recommended sorts for interesting comparative trials, and these can be made at little or no loss of time or money.

No recommendations are made by the Dominion Experimental Farms and Stations until after thorough and complete tests, and until the varieties have shown some superiority over the older and better-known ones. Not only is it necessary, in order to secure profitable crops, to maintain the fertility and tilth of the soil by rotation and the application of manure or fertilizers, but thoroughly clean seed—adapted both to the soil and climatic conditions on each farm—must be sown. Growers are therefore advised not only to study the pamphlet but also to consult as to the choice of varieties with the superintendent of the nearest Dominion Experimental Farm.

THE CHILDREN'S HOUR

A Good Set of Rules.

Here is a set of rules which every girl would do well to follow:

Be brave. Courage is the noblest of all gifts.

Be silent while your elders are speaking, and otherwise show them deference.

Obey. Obedience is the first duty of every girl.

Be clean. Both yourself and the place you live in.

Be the friend of all harmless wild life. Conserve the woods and flowers and especially be ready to fight wild fire in forest or town.

Word of honor is sacred.

Play fair. Foul play is treachery.

Be reverent.

Be kind. Do at least one act of unbargaining service every day.

Be helpful. Do your share of the work.

Be joyful. Seek the joy of being alive.

During Vacation Days.

You will doubtless have an opportunity during vacation days to scatter seeds of kindness while on your vacation by showing your interest in all animal life. Interest others in this cause of mercy, justice and kindness to every living creature.

Protect dogs and cats from ill-treatment. Give them food and water and a comfortable place to sleep.

Discourage nest-robbing boys among your companions.

Horses and cows will enjoy better health and do better work if they are groomed every day.

It is cruel to carry fowls with their heads downward and their feet tied together.

Fish should be killed as soon as taken out of the water by a sharp blow on the back of the head. Such fish keep better and are better to eat.

Honor and humility belong together. The vain girl, who thinks always of herself, misses the path of leadership.

Parents as Educators

Hungry Children—By Lydia Lion Roberts

A mother was looking over a box of old photographs and her little boy was an interested watcher by her side. As one picture came into view the boy exclaimed, "Whenever I see a picture of Auntie Gertrude it makes me feel hungry." Afterwards he explained that it was because she brought him so many good things to eat.

The Aunt referred to was a very busy woman, yet she always managed to find time to slip a gingerbread man, or a popcorn ball, or a surprise package into her bag for the children where she visited. Another child never forgot a basket trimmed with colored tissue paper, holding some baked cookies, that her aunt brought to her after she had been sick.

Food plays an important part in a child's life and a mother may teach by it as well as by other things. All children love surprises, and little faces brighten on stormy days when a raisin cake baked in their own little pan appears, or a lunch-box dinner is placed on the playroom table with dainty sandwiches and fruit, and maybe a bit of candy or a few nuts.

Any little boy or girl likes to learn to cook when mother is cooking and though that is not an especially good time for mother in one way, yet in another way it is the best time, for children are happy when busy and learn quickly when interested. When mother makes bread the little tot should have a ball of dough and a raisin or a bit of jam to make a biscuit. If the child has dishes big enough, and this is important, for there should be a small pan or unbreakable dish to do the cooking in,—the work can be done exactly as mother does it and therefrom come the first lessons in cooking.

"I could turn those doughnuts," suggested a small boy to his grandmother, who was making the toothsome goodies. She started to turn him away as she was busy and a bit nervous, but thought better of it and showed the child just how carefully it must be done. Consequently he turned every single one in a most grown-up way and informed the family proudly that night, "Grandma and I made doughnuts to-day."

The ten cent store has many a small tin and enamel pan that would make a start towards a little girl's cooking set, and would give her much pleasure and profit if she learned to take care of the pans and to cook simple things in them. The best way of all is to suggest to a child that a biscuit be made for daddy's supper, or a tiny cake as a surprise for a playmate. Thus the lessons in cooking and giving, planning and unselfishness are learned together.