Soils and Crops

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Our Friend the Goose.

Since the cost of production became more generally considered by producers of poultry many farmers have been surprised to find that geese as a sideline have been one of their best assets. The goose is a grass eater. Grass often grows on land of little value for other purposes. Such land is a great pasture for the geese.

Even on good land farmers have found that the geese will profitably harvest most of their living until time to prepare them for market. They know that the grass which produces the goose meat is cheaper than the grain necessary to make other poultry meat. Our friend, the goose, is not in as much demand as broilers and fat hens. She does not lay winter eggs. But the dollars that she does bring to the breeder are made at a comparatively low cost of production.

There are two principal outlets for the grown geese. There is a good market for high-class pure-bred stock among breeders who are buying trios as a foundation for their flocks. Many old breeders will need new blood and this gives a market for the surplus ganders at a premium over meat prices.

The goose is the great holiday bird and finds ready sale on the large city markets at that time. Orders can be obtained from local dealers in advance of the holiday trade so that buyers will be assured when the geese have been fattened and prepared for delivery. One trio of breeding birds gives the farmer a chance to develop a large flock of geese each year. Then only a few of the best need be retained after the holiday season and they form the basis for the growing of another fairly large flock during the next year.

Geese will probably do the best near a body of water as the location will bring much feed that the geese relish. Waste land will be useful for a large flock. However, fine success can be obtained on any farm with a grass pasture which is not grazed too closely by other stock. A large body of water might even be a handicap in keeping the geese near home. These birds will not harm a pasture for other stock, providing there is plenty of range to help in avoiding crowded conditions.

It is assumed that the breeder will consider nothing but pure-bred geese. Grades will produce meat but the pure-breds look better and the carcasses will be more uniform in quality and type when the birds are marketed. And the chance of selling hatching eggs and breeding stock cannot be neglected without some loss even if no advertising is done and the breeding stock is only sold occasionally to buyers in the section.

A fine flock of pure-bred geese on a farm is a constant advertisement. They stand out in the field like a finely painted signboard. The motorists that pass the farm are prospective buyers and on a good road this traffic is a constantly increasing chance to cash in on sideline crops.

Geese do not need as much housing as other poultry. Even during the severe winter storms they often seem to enjoy resting on their range headed into the wind. However, it pays to have an open shed or colony house where they can stay nights. This should be dry and on a well-drained site. It serves as headquarters for feeding the geese during the winter and can be locked at night if the geese are in danger from thieves.

Geese may be kept for breeders for as much as ten years or longer. Most breders do not like to keep ganders more than three or four years. The trios of breeding geese should be mated up several months before the breeding season to insure good results. When once mated the trio seem to think more of each other than in the case of other farm fowls. Successful matings should not be broken up except when the birds become old or it is necessary to make sales.

Goslings can be raised by feeding tender bits of grass for the first two days. Then feed a mash four or five times a day, consisting of two-thirds middlings and one-third corn meal. After the first week scalded cracked corn is good. But the young geese are great grass eaters and a grassy range will furnish them with abundant food for growth. Some breeders have raised goslings successfully by first feeding dry bread soaked in milk and pressed out.

A mash consisting of equal parts of bran, ground oats and corn meal by weight is a good feed for geese during the winter and better than whole grain. The crop of a goose is better suited to handle green feed and mash than hard grain. Mangels, clover chaff and all succulent vegetables help in feeding the geese. They are much like a cow in their feed requirements.

Sometimes geese are fed too much corn during the winter and become too fat for breeding purposes. This results in many infertile eggs. An occasional examination of the geese during the winter will determine their physical condition and then any necessary changes in the ration can be made.

Points on Hog and Bacon Markets.

Here are 20 points which outline the present position and the main requirements of the markets for Canadian hogs:—

1. Select bacon hogs must weigh between 160 and 210 lbs., at the packing plant (170-220 lbs. on the farm).

2. Little more than one-half of the hogs are now being marketed within the weight-limit to yield exportable "Wiltshire sides".

3. There is only a strictly limited market for the fat, lard-type of hog in Canada; that limit seems about reached.

4. But there is an almost unlimited market for bacon in Great Britain, provided it is that which the British consumer desires.

5. Great Britain imports normally about 600 000,000 lbs. of bacon every year, roundly 12,000,000 lbs. a week.

6. In 1913, the year before the war, imports from Canada were under 24,000,000 lbs. Just two weeks' share of the normal import.

7. A "Wiltshire side" is a trade term for the shape of the cut. It is practically one-half of the carcass without head and feet.

8. These sides are only given a light pickle in Canada. The smoking and cutting for retail are done by English curers.

9. Domestic taste shows a tendency to prefer lean, streaky bacon very similar to the prevailing taste in Great Britain. This is due probably to an increase in our city dwellers.

10. One type of hog will therefore cater to both the domestic and export trades. This must be the bacon-type acclaimed as best at the Ottawa conference.

11. The standard then set requires jowl and shoulder light and smooth, back and neck to tail evenly fleshed, side long, medium depth dropping straight from back, ham full, good general finish, no excess fat.

12. In the United States hog feeding conditions and market demand for meats differ radically from those in Canada and comparisons cannot properly be made.

13. As Canadian packers can find only a limited market for lard-types they cannot indefinitely take them off the hands of farmers who misguidedly continue to produce such hogs.

14. Canadian hog production on a scale to hold the British export trade cannot be successfully done by dribblets, with a glut at one season, nor in the free-and-easy supply of many varying types of carcasses.

15. There must be uniformity in East and West, and both must furnish exactly what the British consumer wants if Canadian farmers are to get the premium which packers agree to pay after May 1st.

16. In the common interest the breeding of fads must be discouraged. Their carcasses do not yield the right conformation for "Wiltshire sides".

17. Conformation or shape is as important as weight. Two sides from differing breeds may apparently have the proper length over all but if the shoulder of one is too thick, the belly too thin, or the back too fat it will reduce the value of the parts from which the high-priced, well-balanced, lean-and-fat cuts are taken.

18. Farmer-producers are most likely to get the right bacon types among well selected Yorkshires, Tamworths or the bacon sub-section of the Berkshire breed.

19. Other breeds are generally unsuitable and the average farmer cannot afford to breed them.

20. The two inter-linked and essential halves of the livestock industry are:

a. Production and marketing of farm animals;

b. Manufacture and marketing of meat.

The Fertilizing Value of Legumes.

A ton of alfalfa, or clover, or vetch hay may contain as much as fifty pounds of nitrogen. The roots that go with the alfalfa plants covering an acre may contain up to three hundred pounds of nitrogen. The roots of the red clover or vetch plants, that cover an acre, may contain as much as one hundred and fifty pounds of nitrogen. The roots from corn, oat or wheat plants covering one acre may contain twenty-five pounds of nitrogen. With "one million dollars' worth of nitrogen" over every acre of land would it not be good policy to make sufficient use of legume crops and their parasitic soil bacteria to at least provide the needs of a farm in crop production? Nitrogen accumulated by the growth of legume crops is taken largely from the air, while the small quantity saved by corn, oats or wheat roots is gathered from the soil. If you can figure out a rotation to suit your own special needs, and have legume crops growing two years out of four, there will be little need to worry about the nitrogen supply.

Watered stock is a poor investment in business, but it pays profits on the farm.

Fireside planning makes less summer exasperation and perspiration, and more relaxation.

Purpose and perseverance beget power.

Repopulating Farms With Electricity

Here in the Province of Ontario a mighty campaign has been launched to solve the serious question of rural repopulation. The campaign is a co-operative movement and its objective is the introduction of electricity on every farm in the province.

At Niagara Falls at the present time a gigantic development scheme is nearing completion that will supplement Ontario's Hydro-Electric power load by approximately 500,000 horse-power. A huge canal has been dug that will carry the waters of the upper Niagara river ten miles across the highlands to the lower Niagara river, where ten huge generating plants, each capable of producing 50,000 horse-power will be operated. A large portion of this power is to be distributed among the rural districts of Ontario.

Feeder lines are to be constructed this year to all parts of the province and from these power arteries will go branch lines, honeycombing the whole country. Electricity will be available for every purpose on the Ontario farm. Milking machines, chopping and fanning mills, litter carriers and hay-forks will be operated by this magic energy. The farm houses and buildings will be lighted by electricity and the farmers' wives' duties will be lightened in many different ways. Much of the old drudgery will be eliminated and a new era of rural life and rural development will be introduced. That is the bright future that looms in the offing for Ontario and that is what will remove the menace of rural depopulation for all time to come, the farmers behind the movement declare. And there are several outstanding working examples in the province to bear out their prediction.

Hydro-Electricity has been in use in some eight prosperous farming communities for the last four years and the results show that there has been little tendency on the part of the young men and young women in those communities to leave the land during that time, but there has been an appreciable movement of urban dwellers back to those parts. The farmers in those districts hove experienced little difficulty in securing desirable farm labor and in retaining that labor, even when other jobs were very plentiful. In addition, they have been able to reduce their staffs of workers considerably, electricity taking the places of many hired men. And, although the cost of the energy has been much higher than it has been to consumers in the towns and cities, it has still been found to be cheaper than the cheapest man power. When the distributing system has been extended to all the rural parts of Ontario, the cost will be greatly lowered and electricity will make farming an attractive vocation, not a repulsive job.

Simple Ice Storage.

Much waste in food products, more especially in connection with dairying, could be saved during the summer months if the simple instructions for storing ice which are described in Pamphlet No. 2, New Series, of the Department of Agriculture, Ottawa, were generally adopted. Besides this, foods and drinks would be more palatable if every country home had its own supply of ice. As the pamphlet points out, a very simple storage is necessary; any unoccupied corner of a shed will serve the purpose. A rough board enclosure 10 feet square and 8 feet high will hold enough ice to provide fifty pounds per day for 130 days after allowing for a reasonable amount of wastage. Poles, even, may be driven into the ground and lined up on the inside with rough lumber or slabs, leaving a space of about three-eighths of an inch between the boards of the wall and the enclosure covered with a roof to keep out the rain. It is necessary to provide free drainage. About a foot of sawdust should be placed on the floor. A space of one foot should be left between the ice and the wall to be filled with sawdust. When the chinks between the blocks have been filled with crushed ice and the whole frozen together, the ice should be covered with about the same thickness of sawdust as is needed for the sides. The dryer the sawdust the better the ice will keep. The pamphlet also describes an ice well and shows plans for the construction of ice houses.

Chimney Efficiency.

A round chimney, while not so easy to build as a square one, has decided advantages over the latter. It greatly lessens the friction between the walls of the chimney and the rising gases, and has the smallest wall surface in proportion to the cross area. The efficiency of a round chimney twenty-four inches in diameter is almost as great as that of a square chimney twenty-four inches across.—Scientific American.

The Welfare of the Home

Play Places in the House—By Katherine Beebe

During the many days and hours when children can not be told to "run out and play" they must play in the house, as a matter of necessity.

Time and again it has been my lot to spend visiting sessions in houses where to all intents and purposes the only play places were under the visitor's feet, on the arms and rockers of chairs and entirely in the vicinity of the grown people who were going through the vacuous form of conference or conversation. The usual apologies were always forthcoming "The weather is so bad!" "The house is so small!" "The children are so full of life!" "They love to be with mother!" and so on.

Now an A B C application of ordinary sense would make it plain to that mother that consideration for her guest, for her own comfort, for her children's good, demands some other play place, and a little ingenuity would make one possible. Play is so vital a part of a child's life that a place for it, both indoors and out, is a necessity, not a luxury.

One mother whom it is my privilege to know, following the modern custom of opening windows at night, has several little beds in a row in one room,—the smaller one, a larger one being reserved for the necessary bureaus, play space and playthings.

In another home the dining room is the play place, and the very fact that it must be put in order before meal times is giving one group of little folks invaluable lessons in neatness, order, consideration and helpfulness.

But the ideal play place is the attic, and there often is one of some sort. Such a space kept reasonably clean, and having its windows protected, would solve many a household problem. The fact that the attic is cold is in its favor rather than otherwise. Indeed while the children are playing there the upper sash of the windows should be open. There is no reason why with coats, sweaters, caps, and even mittens on, the children should not be told to "run up and play" at such times as rain or cold make outdoor sport impossible. There being no occasion for putting on the despised and clumsy rubbers is also an advantage. Wise parents would see to it that such an attic contained an old mattress for "jumping on," a ladder, a clothesline, some odds and ends of discarded furniture, wooden boxes, a trestle or two, boards, hammers and nails, an old tarpaulin or other cloth for tent-making enterprises, together with such toys as the children choose to take with them.

I have seen many porches which would make fine play places on wet days and wondered why none of them was in use. I suppose mothers consider the weather "too damp." But when I remember a neighbor's healthy brood of children, who, equipped with rubber boots, coats and caps, played out of doors every day in the year, except when the thermometer was twenty below and a wind blowing, I am of the opinion that a few hours in damp fresh air would be much less fraught with dangerous possibilities than whole days in overheated rooms.

AS YE SOW SO SHALL YE REAP

—Detroit News

THE SUNDAY SCHOOL

FEBRUARY 19

Elisha and Naaman the Syrian, 2 Kings 5: 1-4, 9-14. Golden Text—Ps. 103: 2, 3.

Time—Between B.C. 853 and 800.

Place—Damascus, Samaria and the Jordan.

Connecting Links—The Book of Kings does not give a full biography of Elisha. Its purpose was to show his influence as a prophet on the history of Israel.

I. A King's Distress, 1.

V. 1, **Naaman**; the name means "pleasant." **Captain of the host**; not a captain in our sense but in the older sense of "head of the army;" in modern military terminology "general." **Syria.** This was the kingdom of the Arameans whose capital city was Damascus. The Arameans were noted as traders and carriers and Damascus was an emporium for the caravan trade. Like Israel, they formed a buffer state between the powerful kingdoms of Egypt and Assyria. **By him . . . unto Syria.** As yet Naaman had not acknowledged that his victories came from Jehovah, the God of the Israelites. But the writer of Kings regarded him as an instrument of God for the fulfilling of his purposes. **A mighty man in valor**; a man of unusual strength and courage. Ancient warfare depended upon the strength of the individual. Hence the strongest men were placed at the head of the army.

II. A Slave Maid's Advice, 2-4, 9.

V. 2. Although officially at peace with Israel, the Syrians made marauding expeditions on Israelite territory. The object of these raids was to rob the Israelites of their crops and to take captives.

V. 3. Captives taken in war frequently introduced their religion among their captors. The Christian Romans in this way introduced Christianity among the northern barbarians in the third and fourth centuries A.D. **Would God,** etc. The suggestion of the slave-girl shows (1) that she was willing to do a kindness to her master, (2) that Elisha's wonder-working power was well known among the Israelites and that he was popular among the people. **He would recover,** etc. Leprosy was regarded as an incurable disease. The Hebrew maid was therefore lighting the lamp of hope in the soul of a despairing man.

V. 4. The Greek version states that it was Naaman's wife who informed him of the child's suggestion. Naaman was too useful a servant for the Syrian king to lose if there was any chance of his recovery. The king evidently heard a garbled report of the maid's suggestion, for in his letter he made no mention of the prophet, v. 6. His peremptory demand of the king of Israel would indicate that Israel was at the time in a state of vassalage to Syria.

V. 9. Naaman, as befitted his high rank, was escorted by an impressive cavalcade.

III. The King's Cure, 10-14.

V. 10. **A messenger**; Gehazi, his servant. See vs. 20-27. **Wash in the Jordan.** It is not likely that the mere washing in the Jordan was regarded as the cure. The cure would be effected when Naaman went to the Jordan in faith. Jewish law required a man healed of leprosy to wash and cleanse himself and the dip in the Jordan recommended by Elisha would be the rite of purification after the cure or during it. Washing among the Hebrews was a semi-religious act. See Lev., ch. 14. **Seven times.** The priest was required to sprinkle the leper who was cured, seven times, Lev. 14: 7.

V. 11 **Naaman was wroth**; (1) because he thought that Elisha was not showing him the courtesy due to his high office in acting through an intermediary; (2) because, according to his own preconceptions, Elisha's method of cure was to be magical.

V. 12. The words of a patriot who loved his own country almost to his undoing. **Rivers of Damascus.** The region of Damascus is watered by two rivers, the Abana with seven branches, one of which flows through the city, and the Pharpar, running nearly parallel to the Abana some miles to the south. The waters of these rivers, since they come from the melting snows of the Lebanons, are pure and sparkling in contrast to the turgid waters of Jordan.

V. 13. Naaman showed his fine nature in allowing subordinates to remonstrate with him. Their appeal was to common sense. Try the simple proposal of the prophet.

V. 14. **Then went he.** The Jewish rabbis used to say that although God's commands were not always intelligible to man they were tests of obedience and faith. Naaman stood the test of obedience and faith. **The flesh of a little child.** The flesh of a leper is filled with festering sores which become hard and caked. Naaman's flesh became as healthy as a child's. **He was clean.** So loathsome a disease was leprosy that the leper was said to be unclean."

Application.

1. **Naaman a mighty general—but a leper.** No responsibility attaches to him for this affliction. But the defects of heart and character which spoil an otherwise well equipped man—these we must lament and repudiate. This kind of leprosy is within our reach and is curable.

2. **The highest in the land require the same cleaning as the lowest.** The "same cleansing," because it is of the heart. Naaman was a general in the Syrian army. Men like Foch and Haig were generals in the Allied armies, and both are humble Christians, realizing that they were helpless without the presence of the Divine.

3. **The simple unselfishness of the prophet.** Naaman wanted to reward him handsomely, but Elisha was not a trafficker in sacred things. And besides, he did not want the Syrian to think that the favor of Israel's God could be bought and sold like sheep or cattle. In any event he declined the present which Naaman proffered him.

4. **The Christian attitude toward foreigners.** In Canada we have many "foreign born." How shall we regard them? It is known that the attitude that prevailed toward the natives of India who came to our shores twenty years ago had consequences in India that were alarming. On the other hand if we evangelize the Chinese who are in Canada, there is a fine chance that our Christian efforts will bear rich fruits in China itself. Take the people from southern Europe who are living on our prairies. There is only one thing to do. We have invited them to come to Canada, and we must give them the best we have—a pure Christianity. We must serve them, not exploit them.

Bordeaux Controls Potato Leaf Hoppers.

Leaf burn or hopper burn on potato plants can be checked and controlled by spraying with bordeaux mixture.

Experiments show conclusively that leaf burn is caused by the tiny leaf hoppers. The same bordeaux mixture of four pounds of copper sulphate, four pounds of unslaked lime and fifty gallons of water that is used to prevent early and late blight will also repel the injurious leaf hopper and check the extension of any leaf burn to the potato vine that may have started.

The first spray put on potatoes should be a standard lead arsenate solution applied about the middle of June. This treatment will kill potato bettles. Early in July the bordeaux sprays should be used to drive off the leaf hoppers that will now probably be found in considerable numbers. If any potato beetles are still on the plants lead arsenate should be added to the bordeaux solution.

"At least three more sprays of bordeaux mixture following at about two week intervals are essential. When the weather is hot and dry the leaf hoppers are most active and then they do the most injury. This kind of weather also causes the tip burn to spread rapidly destroying the entire leaf. During hot, dry periods this spray has to be used every week to prevent the destruction of the potato vines."

The periods of greatest numbers of these hoppers are of three to four year duration. These occur about every eight to ten years. There have been many leaf hoppers for the past three years. Because of the mild winter numerous hoppers are expected to appear upon unsprayed potato vines this summer.

Each year there are three generations of leaf hoppers. The first is hatched in June, and the second in August, and a short-lived third in September. The females of this second generation live over the winter. They live under dead leaves and grass and along fence lines throughout the winter months. These hoppers are the ones which lay the eggs in the spring and from which the first annual generation is hatched.

THE CHILDREN'S HOUR

The Time I Had the Measles.

The time I had the measles,
I thought up things to play—
It seemed so awful lonesome
When Tommy kept away!

I played I was a soldier
And had to lie in bed,
My wounds tied up with cool things
To help my aching head.

And then I played the bottles
That stood upon the shelf
Were soldiers in the hospital,
And sick, just like myself.

Mamma won't let me touch them,
And so I had to say
Each had some "catching" sickness,
And I must keep away.

Witch Hazel had the jaundice—
Peroxide had the mumps;
The Vaseline had measles,
And looked quite in the dumps!

The Paregoric's fever
Had surely knocked him flat!
Old Castor Oil had smallpox—
I kept away from that!

And so I fought the measles
Like soldier brave and true!
It couldn't daunt my spirit,
Nor even make me blue!

Jim said to me the other day, "I wish I could do something big." Said I to Jim, "What complaint have you heard most frequently?" He instantly replied "Mother says that the wood box is always empty." I came right back and said, "Jim, your big thing at the present time is to see that that wood box is kept filled."

Boys and girls, I have read the lives of many men and women whom the world called great and I have usually found that they always tackled the little things that came along and did them as a matter of course. See the point? Sure you do.

Let's keep the wood box filled.

The outstanding quality of successful farmers is efficiency.