Soils and Crops

Address communications to Agronomist, 73 Adelaide St. West, Toronto

"DIE-HARDS" OF HOG TRADITION.

"Some people object to what they call propaganda in favor of the bacon hog, and claim that they can raise the lard-type hog more economically. In five years' experimental work with six breeds, both fat and bacon type, we have never been able to pick out any one breed as better than others for economy of production. As a matter of fact, strain has more influence than breed upon this point."

The statement was made by Professor Wade Toole before the Western Ontario Dairymen's Convention. He states the case as Professor of Animal Husbandry at the Ontario Agricultural College.

But there is a still weightier reason against the objection to the bacon hog. It is that the lard hog as a paying line for farming in Canada is "at the end of the rope," but the field for the bacon type is only just being opened. This is not a new position, but the fact needs renewed and ever new repetition so that the farmers may not be misguided. The market for a hog—that is, the farmer's product as it leaves the farm—can only be wide and assured when the market for the outcome of that hog—that is, the packer's product in the form of bacon—is also wide and reasonably assured. Only in the home market is there room for the lard types and even that is declining because of the growing taste in Canada for leaner bacon, with close trimming to remove the fat and with consequent waste. Supply has already nearly overtaken the permanent demand.

Packers must more and more look to the export field as the only one in which they can expect enlarged trade. For the English bacon trade, only the select hogs of definite bacon type will serve the best buyers.

Those who "object to what they call propaganda in favor of the bacon hog" may choose for themselves either the continued raising of a hog of which there are already too many and so choose entering into still keener competition among themselves or they may take the more businesslike way of dropping their prejudices and changing the types of their hogs to conform to market prospects. The average farmer also will have to choose for himself whether he will listen to the somewhat insidious propaganda of those who "object to bacon hog propaganda"—the die hards" of the old tradition—or examine the reasonableness of the public statements made by men who handle the product after it has left the farmer's hands. These, in the last resort, must be the men who will pay him either a high price or a low according as his hogs suit or do not suit their customer's demand. A definite premium for the right type is already in force and is being generally paid by packers, whoever may now be intercepting that premium on its way to the farmer. That should be enough to prove the good faith of the packing industry in urging a greater production of the bacon hog, not simply because it differs from a lard type but because millions of consumers after the packer insist on getting a lean, not a fat, bacon.

The chief causes of pigs of the right type not grading "select" are:

1. Overweight—Over 210 lbs. at the market. Fed too long, possibly waiting for a rising market;

2. Heavy feeding just after weaning; pigs pushed on heavy fattening feeds such as barley, buckwheat and corn too soon after weaning;

3. Poor feeding—Pigs starved or stunted in early life or held until old, coarse and rough before they are up to market weight;

4. Under finish—Pigs not finished to the desired 1¼ inches of fat down the back, generally through lack of feed or a mistaken idea of what the finished bacon hog really is.

I WANT MY HOTBED READY AHEAD OF TIME.

It is a mistake to wait until you are actually ready to sow seeds before starting the hotbed. Start it up now and have everything in readiness, even if you don't plan to make your first planting for a week or two yet.

The heart of the hotbed is the heating material that is put into it. This is prepared from manure. The fresher the manure the better. It may be taken from a fermenting pile, or be collected for several days and saved up for the purpose. In either case, all long straw and coarse litter should be taken out. Manure that has burned or fire-fanged will be useless for the purpose.

Unless there is a considerable amount of bedding in the manure, it should be mixed with about a third of its own bulk of litter or leaves. Pile up the whole in a neat square heap, under cover, and in as warm a place as possible, and give it a thorough wetting to start rapid fermentation. After three or four days fork it over, turning it "inside out," and pile it up again, tramping it down firmly as you do so. Add enough water to make it again thoroughly moist.

For the best results this operation should be repeated three or four times so that the whole mass will be heated evenly through and through, otherwise the hotbed when made up will be "spotty," and the results will be very uneven, especially along the edges. For a small frame of two or three sashes half a cord will be sufficient. It should be placed in the frame after it is fermenting hotly, and firmly packed down in a solid mass one or two feet deep.

On top of this I put from four to six inches of soil, six if any plants are to be grown directly in the soil. Personally, I always prefer to use "flats" or seed pans in which to start the young plants, and the greater depth is not needed except where radishes, lettuce, beans, or some other vegetable is to be grown directly in the soil.

Where only two or three sash are wanted, and there is a pile of fermenting manure available, the hotbed may be built directly on the manure pile, by embedding in it a bottomless frame of suitable size, and putting the soil on top of the manure within this frame. A frame 6x9 feet will accommodate three standard 3x6-foot sash. I have used this simple method very effectively. The manure must be actively fermenting, and the pile must be in the full sunlight.

After the hotbed has been made up and the soil put in, a thermometer should be plunged into the bed and watched for a few days. When it only registers 75 or 80 degrees with the sash left on, then it will be safe to begin sowing seeds. No plants should be set in the frame, however, until it is 10 to 15 degrees cooler. —F. F. R.

POULTRY

There are two main points to be considered: First, the selection of birds that have the characters desired; and secondly, a further selection from these of birds that can produce offspring as good as or better than themselves, so says Professor W. R. Graham of the Ontario Agricultural College.

Many are of the opinion that "like begets like." In general, this is true, but it is true for general and not for particular qualities. It is true that a male White Leghorn mated to White Leghorn females will breed chickens that are White Leghorns, or that have white plumage, yellow legs, and white earlobes. But of these offspring there will be no two chicks exactly alike. We find large and small Leghorns; most of them never go broody but some do; some lay large eggs, others small eggs. And we find a great variation in the number of eggs produced by different hens.

Selection is made on the basis that like will produce like, but experience has taught all breeders that to secure uniform superiority, they must carry on the selection through generations of poultry. If we select birds that have laid better than 200 eggs in twelve consecutive months and mate these to a male of similar strain, we do not expect to get all daughters that will lay 200 or more eggs a year, but we do expect upon the average a better production than had no selection been made.

The reading habit is a profitable one to cultivate.

The Turkey and Its Peculiarities.

The wild turkey is a native of North America, and years ago ranged from Canada to Mexico, and throughout the vast forests that extended thence to the northwest, along the courses of the Mississippi and the Missouri, and to the Rocky Mountains. As civilization advanced and population increased, the wild turkeys receded and decreased until now they are gradually becoming extinct.

The wild breeds (known as the North American, Mexican and Honduras) live on worms, insects, berries, seeds and grass. They flock together in October and direct their course to the fertile plains through which large rivers flow. Then they disperse in small flocks, eating the fruits of the cultivated lands, and if hungry during the winter, are apt to become so bold and familiar as to enter farmyards in search of food.

THE MATING SEASON.

Early in spring the hens leave the cocks, actually shunning them, and roost apart. The males, however, are on their trail, and loudly express their anger or love, whichever it may be, in that soft strain peculiar to the cock, expressed by the word "gobble."

The disposition of the female is, as a rule, more mild and gentle than that of the male. When leading out her brood of young to collect their food, though so large and apparently so powerful, she affords them very little protection against the attacks of any rapacious animal that may approach them. She rather warns them to shift for themselves, and does not prepare to defend them.

With our domesticated turkeys, laying starts in spring. They hide their nests in some retired, obscure place. The hen sits with remarkable perseverance, and if not removed will almost perish with hunger before entirely leaving the nest. She generally lays in the morning, and often continues daily, until from fifteen to twenty eggs are laid in a season; governed according to the age of the hen. Young hens lay fewer eggs than older hens. In the second laying the hen hardly ever exceeds ten or fifteen eggs.

BEST AGES FOR MATING.

The best matings are either two-year-old cocks with pullets, or a cockerel with two-year-old hens. One service of the gobbler is sufficient for each setting of eggs, and a single male can take care of from fifteen to twenty hens. While the gobbler has a greater influence on color and shape of the progeny, large hens are needed to produce big turkeys.

Turkeys are more creatures of habit than any other of our feathered fowl, and will come home to roost at night if one will make a practice of feeding them, however lightly.

In the selection of breeding stock, the aim should not be for great size. For active vitality and sure breeding, the male must not be too large. In selecting hens, one must not be influenced by great weight. Good form, fine stout legs, square bodies and breasts are needed. Practically the same is true in the male. It is important to have an unrelated male in the flock, as inbreeding will do much harm.

The Ice Supply.

It is a difficult matter to carry on dairying during the summer season without a supply of ice. Indeed, unless one has a particularly cool cellar, a supply of ice adds greatly to the comfort of any household during the heat of the season. The storage of ice is a very simple matter; any unoccupied corner of a shed will serve for the purpose. A enough board enclosure ten feet square and eight feet high will hold enough ice to provide 50 pounds per day for 30 days, after allowing for a reasonable amount of wastage. The smaller the quantity stored, however, the larger is the proportion of waste.

Provision must be made for the drainage of an ice storage. Unless the soil underneath is of open texture, it is well to cover the floor with a few inches of gravel. A layer of sawdust should then be put down to receive the ice. The ice should be taken from a pond in blocks which can be built up into a solid mass. A foot of sawdust on each of the four sides and an equal quantity on the top will preserve the ice even through a long hot period, provided a roof protects the mass from the sun and rain.

Plans of ice storages of all large dimensions are contained in Pamphlet No. 2 of the Department of Agriculture at Ottawa. Reference is made to ice wells, which are used in some parts of the Western provinces. These are constructed about feet deep and a diameter to suit requirements. A well six feet in diameter, filled six feet in depth with ice, is said to hold about four tons.

United States Millers Need Our Wheat.

The Northwestern National Bank Review, published at Minneapolis, Minnesota, pays high tribute to the quality of Canadian hard spring wheat in the following quotation from their December issue:

"Flour mills in this city are running at one-half capacity or less, the output is booked almost entirely for domestic trade. Canadian mills, the other hand, have been reported as large an export demand as they can handle. Even at the high rate of duty it is being found desirable to bring wheat across the border to Minneapolis for domestic use, though the amount is not large; there was a noticeable increase during November. Importations into this district—chiefly, if not entirely, for manufacture in Minneapolis—are reported by the Customs Service at Duluth as 8,602,631 bushels during 1920; 8,687,687 bushels in 1921; 343,165 bushels in 1922; and 1,010,123 bushels for the first eleven months in 1923."

Potato Disease Investigation.

Investigational work carried on by the Department of Botany of the Ontario Agricultural College during the past six years has brought out the following facts:

That selected, certified seed potatoes give much better results than the uncertified seed potatoes which have been commonly used by the farmers of this province in the past.

That Northern Ontario seed potatoes give as good yields on the average as those imported from the maritime provinces.

That in certain sections of old Ontario excellent seed potatoes can be produced by continued selection and roguing.

Powdered Skim Milk.

The comparative values of powdered skim milk and powdered buttermilk were found to be about equal in experiments carried on at the Ontario Agricultural College. The average total gains per pig were 121.6 pounds for those fed on the skim milk powder and 122.8 pounds for those fed on buttermilk powder. Although the feeding value of these products is good, the market price for hogs and the high cost of the skim milk and buttermilk powder makes its use prohibitive as live stock feed.

We Have an Asparagus Bed

BY MARGARET HENRY.

Mother had raised and sold asparagus as a money-making proposition when she was a girl and thought it would be nice to start a bed for us children to have for our own. She planted a package of seed and before she covered it, she planted radishes, lettuce and onion seed in the trench with the asparagus seed. The asparagus is slow to germinate and makes very slow growth above ground the first year, so mother planted her early garden "sass" in with it to mark the rows so she could hoe it and keep down the weeds. She could have bought one-year or two-year plants from the nursery at a very small cost and thus gained a year or more on the crop but she wanted to start from the seed.

All summer mother kept the plants clean and well hoed and the next spring they were spaded up and set in the permanent bed. There were over four hundred plants and it made a large bed. We kept it hoed clean and forked up with the potato fork all that summer and put all the droppings from the chicken coops on it.

In the fall we put on a cover of litter and rakings.

The next spring we raked the cover up in rows between the plants and burned it.

The third summer we cut the young plants occasionally for home use.

The third fall it was very bushy and rank and we cut the stalks with a scythe and later burned them.

The fourth spring the bed was a mass of nice fat stalks every morning and we arranged to sell it to the grocers and hotels. The early crops sold for 20c a bunch, later it was 15c, then 2 for 25c and at the end of the season it brought 10c a bunch. We cut it every morning with a knife, going just below the ground. It was sorted, all inferior or spindly stalks being thrown out and then tied in bunches for the market. If we could not take it to market every day, we put it in the cave with a damp cloth over it.

The first year we sold over $15 worth besides using it nearly three times a day on our table and giving lots away to our friends. It has been more profitable each year and the nice thing about an asparagus bed is that it will grow better as it gets older. Now it requires almost no care. We try to keep the weeds out in the cutting season, later they are smothered out by the stalks.

Asparagus has almost no insect enemies or diseases that prey on it. We fork it up as soon as the frost is out in the spring and put well-rotted manure on it in the fall after we cut and burn the stalks following a killing frost.

A St. Patrick's Day Party

In Honor of Pat and His Pig

BY MYRTLE JAMISON TRACHSEL.

A pasteboard pig bearing the verse given below might be used to summon the guests. A pig cut from an advertising page could be used as a pattern.

Shure and ye must be comin' along
To celebrate the Day.
Ye may talk about pigs in the good ould brogue,
So plaze don't stay away.
March 17th. (Time——Place——)

You might let an old Irish motto hung up in a conspicuous place, greet the guests as they arrive. The letters should be in green on a white card, with a band of green crepe paper pasted smoothly along the edges to represent the frame. The motto "Gaid Mille A Failthe" ("A thousand welcomes to all") will probably need to be given verbally in English. Shamrocks, potatoes, pipes, Irish hats, and pasteboard harps might be used as decorations too. But plenty of cut-out pigs are necessary, for this is to be a "piggie" party.

The brogue of old Ireland—the speech of the evening—will keep the minds and tongues of the early guests busy while others are arriving. To make true Irishmen of the guests, they should be given an opportunity to kiss the "Blarney Stone" the first thing.

The stone in this instance is a pyramid of stones. Some of the "stones" are pieces of taffy candy, colored moss-green and wrapped in bits of paraffin paper with twisted ends. Others are bits of pebbles or small rocks wrapped in the same manner. The guests, in turn, are blindfolded and allowed to kiss the Blarney Stone. Then they are told to take a piece as a souvenir. Should they draw a piece of taffy, they are in luck; if they have a stone, they may be allowed to try again later. Of course, any amount of blarney is permissible after one has kissed this famous stone.

"Poor Piggie" is a variation of an old game that never fails to bring screams of laughter. The players are seated in a circle. A boy is asked to be the poor piggie. He gets down on his hands and knees before one of the young ladies and squeals in his most pathetic manner. While he squeals, he makes faces, and does anything else becoming a pig, the girl must show her appreciation by continuously striking his head and murmuring "Poor Piggie." Should she laugh, or even smile while saying it, she becomes the piggie and must squeal her best while on her hands and knees before one of the men. Should she manage to keep a straight face, poor piggie must try to make some other girl laugh. Seldom will one have to try the second time, especially if he remembers to scratch his back against the leg of her chair.

Next you might play "Pigs in the Parlor." Partners for this game are found by cutting heads, tails, legs, ears, or feet off cardboard pigs. The boys will search for the girl who has the piece needed to finish his pig. These pigs are to serve as models. A small potato and fruit knife are given each couple, also a few strips of green paper and toothpicks.

The boys carve pigs from their potatoes, using the toothpicks for tails and ears. The girls may make dresses, fluted ruffles for the pigs' necks, or any other sort of decoration.

When the work of each sculptor has been sufficiently admired, ask the guests to bring their chairs into a close circle to play "Moving Piggie Up." Take as many of the potato piggies as your two hands can possibly hold, and pass them to your next neighbor on the left. They are to be passed on around the circle as rapidly as possible. Should a player drop a potato piggie, he must recover it by his own efforts and without putting the others down. He then starts them all on their way again, but he must leave the circle. His chair, however, remains in place.

When someone has left the circle, have a helper quietly take him into the dining-room and serve him with refreshments. As others drop out they should be spirited away and served without letting the others know what is going on. Those who are left in the circle, and are trying so desperately hard to retain their hold on the slippery piggies and get them across the ever-growing number of empty chairs, will eventually wake up to the fact that they are the "grane" ones.

You might serve refreshments cafeteria style. White and green signs set up at intervals along the table call attention to the food piled before them. The signs bear the legends: Blarney Sandwiches, Sod Sandwiches, Shillalahs, and Irish Greens. In spite of the sound of the names the food is most inviting—and digestible.

THE CHILDREN'S HOUR

THE GREEDY MOUSE.

[illegible] one afternoon Rolly Rabbit [illegible]uin sat reading the latest edi- [illegible] "Woodland News."

[illegible]e Glennie Squirrel, who lives [illegible]odside, fell out of a hickory [illegible] and broke his leg. Doctor [illegible]ck set it for him and he is [illegible]g nicely," said Bruin, read- [illegible]t of the latest news.

[illegible]ad for such a little fellow. [illegible]ve can get over to see him [illegible] Here it says that a robber [illegible]nnie Fox and stole his gold [illegible] chain, when he was return- [illegible] Glenwood. That is not far [illegible] We must be careful, Rolly.

[illegible]ntle "tap, tap, tap." [illegible]ly opened the door there [illegible] mouse with his clothes [illegible]s face dirty, and with a [illegible]ook upon his thin face.

[illegible] Mr. Rabbit, I'm hun- [illegible] please have something [illegible] little I have eaten for [illegible] begged the little mouse.

[illegible]in, poor little mouse, [illegible]e what we can find," [illegible]y.

[illegible]ful meal was prepared [illegible] mouse, and how he did [illegible]nd finished, his little [illegible] full he just could not [illegible]mb. With an envious [illegible] the remaining food [illegible] filled cupboard. He [illegible] at more.

[illegible]bit, thank you so [illegible] feel much better," [illegible]e, Mousie. I am [illegible] I can share with [illegible]olly. And Mousie [illegible]ackie Mouse (for [illegible]net an old friend, [illegible], was very hun- [illegible] had been that [illegible]re is a lot of [illegible] said Mackie [illegible]e," said Billy [illegible]arved."

[illegible]gan to feel as [illegible] more himself, [illegible] Rolly's house. [illegible]r around the [illegible]way to get in. [illegible]room window. [illegible]d Billy.

[illegible]t be awfully [illegible]they were [illegible]ll the other [illegible]rd a noise. [illegible] Billy, in a [illegible]d Mackie.

"That noise was in the bedroom and we can't get out the window."

"Here is a knot-hole, we will run in here for a while until everything is quiet," said Billy.

But right in that little knot-hole Rolly had set a trap for naughty thieving mice, so that was the last of Mackie and Billy Mouse.

Underground Garden Irrigation.

Where the natural rainfall is insufficient for intensive gardening purposes one of the best and most effective ways of furnishing the moisture to the plants is by underground irrigation. This will be found advantageous for three reasons. In the first place the water thus supplied reaches the roots, where it is wanted, and there is a minimum loss by evaporation. In the second place water is saved, and in the third, there is no crust to form on top as there is when the water is applied to the top of the ground.

When the ground is plowed in the spring it is gone over with a lister, forming alternate ridges and furrows. These will differ probably ten inches in height. It will be necessary to go again over the ground with the lister, and the second covering should result in furrows twenty inches deep, or better. In these the two-and-one half-inch tile is laid. If the furrows are rather close together the tile need be laid only in every other one. They are simply laid with the joints as close as possible. The far end of each is plugged with concrete or clay. The front ends are finished off with a T section and another section added to bring the inlet well above the top of the ground. Then the ground is leveled again and planted in the ordinary way.

If water is poured into one line for a few minutes it can be filled. It will then soak into the ground in all directions. Thereafter the water is added only when necessary to keep the subsoil in the proper condition. In the fall the lines need not necessarily be removed, but left for use the following year.

It has been conclusively proved at the Dominion Experimental Station, Cap Rouge, Quebec, that well developed heifers, over six months of age, carrying a reasonable amount of flesh, are better wintered in an open front single board shed than if closely housed.

These are the days when the fruit man should get into the orchard and cut out the blight cankers from trunk, limbs and branches.

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