Soils and Crops

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Fall Plowing Helps Me.

When I started farming I did but little fall plowing, partly because I was so busy, and partly from lack of appreciation of its value. Now all my land that is going into crops the next year is fall-plowed, and some is plowed early and worked during the fall.

The first advantage I noticed of breaking up land in the fall was that the spring work could be got out of the way at a much earlier date. And, since our season usually does not open up until well into April, this was an extremely important item. Every crop but buckwheat and late potatoes must be in by Empire Day if the best results are to be expected. Then, if these happens to be a wet spring, the approximately seven weeks during which the planting and sowing must be done may be reduced to three or four. The slowest job on the farm is plowing, especially with a two-horse plow. If this is done in the fall, the actual spring work is cut about in half.

At times I have had spring-plowed sod, especially when plowed rather late, which did not do well on account of the grass layer cutting off the capillary water from below. I had one crop of corn that was nearly a failure for this reason. There was quack grass in the sod; and though there was not enough moisture for corn, it was sufficient to make a fine piece of quack.

Another reason why I changed to fall plowing is that the frost action is better than fitting. Just north of my farm a clay section begins where they simply can't do anything at all with spring-plowed land. But when plowed in the fall the frost breaks up this stiff clay thoroughly, and the fine soil makes excellent crops.

Formerly I had quite a little wet land, though now it is about all tiled. If this land was left until spring, it was usually plowed when parts of it were too wet. The result, of course, was partial failure in those spots. When fall-plowed, this ground was usually in good condition in the spring, since the surface exposed by the furrows caused the land to dry out sooner. I used to plow in not-too-wide back furrows, and run the plow in the bottom of the dead furrows a second time, furnishing drainage to the depth of 12 or 14 inches. This was a great help.

I do not mean that I never had good luck with spring plowing, but simply that I frequently had conditions where fall plowing was far superior. On the other hand, I have never observed conditions where spring plowing was better. I used to think that I had to plow in the spring for potatoes. But when a field of potatoes was partly fall-plowed and partly spring-plowed, I found no difference. Although I never put them on sod land, I think that in that case fall plowing would show an advantage. I use a double disk in fitting, and if this is set so that it cuts eight inches deep it loosens the soil up about as well as plowing.

Whereas I was formerly behind with my work whenever the season was late or wet, and often a little late even when it was not bad, now, with the same number of horses (though better ones) and a light tractor, I am farming nearly three times as much land, and am always finished on time. Before getting the tractor, with twice as much land as at first, and with the same number of horses (four), I was also on time, and this was simply due to the fall plowing. —A. H. D.

Why It Pays to Feed More Clover Now.

With the low prices for milk and butterfat most dairymen are getting, it becomes doubly important to get maximum production at the lowest possible cost. The most expensive part of the ration usually is the protein. Protein is very essential to producing cows, especially if they are pregnant, when a large part of the protein goes toward the growth of the fetus. And, of course, breeding and growing stock of all kinds requires protein.

Dairy cows usually get a large part of their protein in the form of a linseed-oil meal or cotton-seed meal. Supplied in this way the cost is relatively high. Legume hays, especially alfalfa and red clover, can be used to supply a large part of the protein at a low cost. These feeds can be grown on almost any farm, and if properly cured are very nutritious. Moreover, cows seem to relish alfalfa and clover more than timothy. As a rule, the prices of clover and timothy run very close together.

But timothy is very low in protein and, when it is fed, the protein shortage must be made up, generally, by increasing the amount of oil meal or other protein supplement. If alfalfa or clover is fed, the total grain ration, and especially the protein supplement, can be decreased, thus materially cheapening the cost of the ration.

Let us consider two cows, each weighing 1,200 pounds, and giving 30 pounds of milk containing 3½ per cent. fat. Say that their feed requirements are just the same—that is, that each requires the same amount of protein, carbohydrates, and fat for the maintenance of her body and for milk production. Both cows get the same amount of corn silage (36 pounds), the same amount of hay (12 pounds), and a grain ration of corn, oats, and oil meal.

The difference comes in feeding one cow alfalfa and the other timothy. The cow getting timothy requires a bigger grain ration, especially the expensive oil meal, in order to supply the protein deficient in the timothy. At present feed prices, the cost of producing a pound of butterfat with the alfalfa ration is 19 cents, and 25 cents with the timothy ration. In some localities farmers are getting as low as 22 cents a pound for butterfat, so that not much profit could be made on a timothy ration.

Another valuable thing about alfalfa is its high lime content. This makes it especially valuable in balancing a ration containing corn or corn silage. Although alfalfa is generally given first place as hay for dairy cows, good clover follows it closely, it being considered about nine-tenths as valuable as alfalfa for dairy-cow feeding. Sweet clover has about the same feeding value as alfalfa, but cows must be taught to eat it. This can be done by mixing a small amount of sweet clover with the other feed at first, and slowly increasing the amount fed. But, no matter which variety is used, production costs can be greatly reduced by feeding one of these three valuable legumes.

Raising the Right Type of Horse

There is a great need to-day for more efficiency in horse-breeding or better, perhaps, for the production of horses that will attain the highest point of efficiency in the work they are to do. The manufacturer of motor trucks and tractors has in view at all times the efficiency of his product. His constant aim is to so perfect his product that it will perform the work required of it in the most efficient and economical manner. The horse producer should have this same incentive in view.

Ten or fifteen years ago we were more efficient in horse production than we are to-day. Breeders had ideals before them which they aimed to attain. There were ideals in heavy drafters, in light drafters, in wagon horses, and in lighter types, which farmers endeavored to follow in their breeding operations.

There were certain districts where a large measure of efficiency was shown in producing the drafter; other sections were known for the lighter types of horses. This cannot be said to-day. There seem to be no centres that can claim distinction in producing any particular horse type.

True, the number of types of horses in demand now is fewer than in former years, yet even in types most in demand to-day, such as good draft horses, there are practically no sections where the buyer can go and be sure of having his wants supplied.

It seems to be too much of a hit and miss proposition, this horse production business. If one hears of a good big draft gelding for sale in one part of the country, one may have to travel one or two hundred miles to find a mate to match him. There seems to be no continuity, no co-operation in producing to meet the demand to-day.

What constitutes efficiency in the heavy draft horse? To be thoroughly efficient a draft horse must with its mate be able to pull a heavy load, on level ground, with ease and quickness. To do this a horse should be, at least 1,700 pounds in weight, though 1,800 or over is better. Along with this weight he must be well muscled, have a good set of feet and legs, be well built and well proportioned, and should be sound in wind and limb.

To get these elements of efficiency in the draft horse the breeder must not trust to chance in his breeding operations. If he has the right type of mare, he must see to it that the stallion used will get the right type of offspring. It will pay to go to considerable trouble to secure the right type of stallion, as the heavier his weight consistent with good quality, the better.

The same reasoning holds true in the production of other types. The type next to the heavy drafters in demand to-day and which commands good prices, is the sound, well-built wagon horse. This kind should weigh from 1,100 to 1,300 pounds. For heavy delivery work, such as delivering milk, a horse must have weight enough to haul from 2,000 to 2,500 pounds, and get away with it at a reasonably swift gait. The lighter delivery type does not require so much weight, but must be well built, sound and active.

There are other types more or less in demand, such as saddle horses, and animals suitable for military purposes. These cannot be secured at hit and miss breeding, though in years gone by there were sufficient left-overs from the production of other types that met the needs of the military demand. But there does not appear to be many of this kind to-day, and military horse buyers report a general shortage.

But whatever type one aims to produce, he must see to it that it will perform the work it is called upon to do in the most efficient manner possible. Horse breeders must pay particular attention to this, if they are to successfully compete with the motor truck and tractor men.

Good breeding must be supplemented by good feeding and care of the colt from birth to maturity. No matter what ideals have been followed in breeding the draft horse, if the colt is not well fed and kept in a thrifty, healthy, growing condition from birth, it will not have the weight and size needed in the ideal draft horse. There must be no "stunting" period, as is too often the case, during the growth of the colt. As soon as the colt is weaned, it should be kept in thrifty condition. Just here is where many horse breeders fall down. After the colt is taken from its dam it is often left to shift for itself, and soon becomes unthrifty and stunted in growth. If the colt once receives a serious setback, it rarely recovers the lost ground.

To get size and weight in the draft horse, the breeding must be right and so must the feeding. A good big draft mare bred to a stallion that is a ton or over in weight, providing he is sound and has a good set of feet and legs under him, will produce the right type so far as breeding is concerned; but if the colt is neglected and not kept growing from birth to maturity, the type of heavy drafter most in demand to-day cannot be secured.

The Dairy

An animal husbandry specialist says that weaning, shipping, dehorning, castrating and suddenly changing the calves from grass to dry feed often checks completely any gains for three to six weeks. If any of these causes can be eliminated the checking of growth will be less. Therefore, fattening calves on the farms on which they are born should produce good results as this eliminates shipping and change of feed. The castrating should be done when the calf is young, as should also the dehorning, which should be done with a caustic. They should be started on grain in the fall before they are weaned, as they will produce greater gains with less feed than if bought on the open market in the fall.

It has been found that calves make gains almost as fast as two and three year old cattle, and will make a hundred pound gain on about two-thirds as much feed as the older cattle. They appear to grow rather than fatten for about the first one-hundred-thirty days, but from then on they accumulate fat rapidly. The average feeder of baby beef should figure on a two-hundred-day feeding period in order to make a satisfactory finish on the calf.

Appointment for Commissioner.

Mr. Geo. E. McIntosh, who has for the past five years occupied the position of Transportation Specialist of the Fruit Branch of the Department of Agriculture at Ottawa, has been promoted to the position of Fruit Commissioner. He succeeds Mr. C. W. Baxter, who recently left the Department to assume the management of the Niagara Fruit Growers' Ltd.

The Fruit Branch fills an important position not only in the fruit growing industry but it is also concerned with the trade in vegetables. Its primary function was the administration of The Fruit Marks Act, under which all fruit intended for export trade was inspected to see that it carried brands that corresponded with the character and uniformity of the fruit throughout the package. Reporting on the fruit crop conditions has also been a duty of this Branch. For many years it has issued for five summer months —June to October—a printed monthly fruit report. During the past eight years it has also issued a telegraphed market report twice a week during the period of heavy movement, and once a week thereafter.

A further development of the work of this Branch has been in relation to transportation, which for fruit is a matter of utmost importance. Since the organization of the transportation division some five years ago, an intimate relationship between the fruit and vegetable producer and the transportation companies has been developed. In the capacity of Transportation Specialist, Mr. McIntosh has been constantly on the move from coast to coast endeavoring to bring about closer and closer co-operation between the producers, dealers, and carriers. Educational and experimental undertakings have been carried through. Tariff and traffic regulations intended to promote the general welfare of the fruit and vegetable industries have been amended. This has been carried on by conference with railway, express, and steamship officials, who have responded readily to the reasonable recommendations made. Major traffic matters requiring adjustment have been dealt with through the Board of Railway Commissioners, which have resulted in great satisfaction to the fruit growing and vegetable growing industries.

Following experimental shipments of tender fruit, alterations in the interior construction of refrigerator cars have been brought about. The change has been of such a character as to ensure the better condition on delivery of fruit moved to long distance markets.

Before entering upon this work Mr. McIntosh was engaged by the Ontario Fruit Growers' Association to investigate marketing conditions and transportation facilities for the Province of Ontario. Mr. McIntosh's experience in these various capacities have amply prepared him for his present more responsible office.

Live Stock Movements for Two Years.

The shipments of live stock according to the Dominion Live Stock branch reports, from the five shipping provinces last year compared with the year before were: Quebec, cattle, 31,928 against 56,617; calves, 64,941 against 75,307; hogs, 79,086 against 83,907; sheep, 164,750 against 159,617. Ontario, cattle, 342,783 against 290,898; calves, 102,160 against 114,315; hogs, 371,635 against 378,854; sheep, 268,202 against 278,460. Manitoba, cattle, 66,577 against 102,129; calves, 14,076 against 15,117; hogs, 80,652 against 102,303; sheep, 31,120 against 49,957. Saskatchewan, cattle, 84,197 against 156,965; calves, 6,812 against 9,825; hogs, 51,731 against 44,387; sheep, 28,338 against 18,838. Alberta, cattle, 143,457 against 163,686; calves, 19,251 against 20,561; hogs, 86,401 against 56,435, and sheep, 91,184 against 62,664.

Bulldozing Fathers.

It is a strange thing that so many fathers think they have an absolute ownership in their children; that they can boss them, order them about, scold, bulldoze them in any way they please; treat them as if they had no individual rights whatever.

You should be very careful how you treat your children, my friend. They will not always be in your home, and some day you may bitterly regret the harsh callings down you so unnecessarily gave them. Many a boy has been driven to wrong courses by a domineering, bulldozing father. A brutal calling down by her father has sent many a girl from her home with bitterness in her heart, and perhaps led to her undoing.

Even for wayward and unruly children, love is the only safe and efficacious corrective.—O. S. Marden.

Economy of Dairy Products as Food.

There is one especial virtue in the many recipes given in the series Why and How to Use Milk and Its Products pamphlets issued by the Dominion Department of Agriculture, and that is that the large majority call for no fire or coal-burning. The few that do require a warm or boiling ingredient necessitate the use of nothing more serious or costly than a little oil, gas or electricity by way of heating. This is remarkable evidence of the economy of dairy products as food.

PASSING THE "BUCK."

SMOKE
OLD CHUM
The Tobacco of Quality
½ LB. TINS
and in packages

Parents as Educators

The Curl Made Peggy Cry—By Minerva Hunter

Mrs. Ivy was sitting at her living room window sewing buttons on a new gingham dress when Mrs. Baxter came to her dining-room window and looked out. "I've had such a scare!" shivered Mrs. Baxter.

"Peggy?" inquired Mrs. Ivy anxiously rising from her chair. "Do you want me to come over and help you?"

"No, no, Peggy isn't really hurt," said Mrs. Baxter, "but Oman nearly put her eye out with the scissors. When I went out of the nursery to empty the bath water, he cut one of her curls off. I happened to look through the door and there he stood with the curl in one hand and the point of the scissors within an inch of Peggy's eye! I was never so frightened in my life. Every mother has anxious times with her children, but when one undertakes to rear another person's baby the responsibility seems to double. Peggy's father is so pitiably grateful because we have consented to care for the baby that I feel even more responsible for her than I did for Oman. If my child should injure Peggy's eye I'd never get over it!"

"Oman is very fond of Peggy," said the neighbor. "I never saw greater devotion on the part of a little four-year-old boy. He would do anything to keep her from crying."

"Yes," agreed Mrs. Baxter, "that is true, but why did he go near her with the scissors? He is never allowed to play with them,—in fact I punish him every time he handles any but his blunt pair."

"It may be he had a really good reason for cutting Peggy's curl," suggested Mrs. Ivy. "I mean a good reason from a child's point of view. Did you ask him why he did it?"

"No. I put him to bed as fast as I could and brought Peggy in here and put her in the kiddie coop. Now that you mention it, Oman did look quite puzzled and once or twice he tried to tell me something, but I was so faint with fright I did not listen. Oman is a good child and does love Peggy. I'm sure he had a reason for what he did. Maybe I was too quick in my judgment, I'll go now and talk with him."

It was afternoon. Once more Mrs. Ivy sat beside her living room window. Presently a childish voice addressed her. "Scissors are dangerous," announced little Omar Baxter, looking at her very seriously.

"Yes," agreed Mrs. Ivy, "very, very dangerous."

"When a boy loves his little baby cousin,' continued Omar in the tone of one reciting a lesson, "he never goes near her with the scissors. Even if the baby cries and cries because her curl hurts when it is brushed the boy does not cut the curl off. A baby jumps real often and might stick the scissors in its eye. You see, a baby can get over a curl that hurts, but a baby could never, never grow a new eye!"

Let's Invest at Home.

Sometimes I wonder if we farmers are making the best investments possible. We all have spells when we want to get a few blocks of stock in something that pays 500 per cent. on our investment. We are apt to feel that farming is too bloomin' slow. At least, I know I feel that way sometimes. I've never invested in oil or rubber stock, or even played on the stock exchange, although I'll admit I've wanted to. Some of my neighbors have stocks in Mexico or South America. Once in a while they get something on their investments; mostly they don't.

The longer I farm the more I am inclined to believe that we may well invest closer to home. One of the drawbacks to an investment 800 miles from home is that it is hard to look after it all the time. There are places where the renter may invest as well, but this is aimed at the farm owner, as I am more familiar with that kind of farming.

For example, there are very few farms that are well drained. Oh, that is a common thing! I wonder if you can find a single farmer who has tiled within the past ten years who will not say it is a good investment. I know of dozens of farmers who have realized from 10 to 50 per cent. on a tiling investment. An investment that makes 50 per cent. isn't to be sneezed at, is it?

Few farms have all the buildings that are needed. Maybe it is nothing more than adequate equipment for the hens, but if it isn't there when needed a loss results. If an investment in $200 worth of chicken-house preferred stock doesn't pay immediate returns, I'll miss another guess.

A building to shelter thousands of dollars' worth of farming machinery is needed on lots of farms. Leaving expersive machinery out in the weather is a loss of so many per cent. on an investment. When the building is erected the loss stops. Isn't that equal to a high interest rate? I can't see it any other way.

There are few fields on most farms that couldn't be improved with commercial fertilizer. I know of cases where this investment has realized 400 per cent. I have realized this myself in additional crops. Usually it is less, but I have seldom used it when I didn't realize from 50 to 100 per cent. on what I spent. It's a quick return on the money, too. That's something one doesn't always get on a "wildcat" investment.

Few farms have every farm tool that is needed. Perhaps it's a grain drill or a corn planter. You may have borrowed one from your neighbor. Perhaps he was using it when your field was ready, and you waited. It rained. Then you prepared your field again. By that time a week had passed and your corn crop was late enough to be caught by frost. Would $100 invested in a corn planter have paid oil-stock interest on the investment?

I know these things to be facts because I've learned the lesson in many of the cases mentioned above. I've also made the investments I speak of, and I know they pay.—E. R.

Select Plenty of Seed Corn.

Farmers are advised to select about twice as much seed corn as they will need for 1923. It is estimated that about fifteen medium sized ears will plant an acre, and that the average farmer the country over will use about eight bushels of seed. If he spends two days selecting and sorting his seed, he will have plenty to choose from next spring.

What is left over from the double amount selected that has stood a good germination test can readily be sold to advantage, or may be kept as partial insurance for the next season's seed. The best time to select the seed is when the leaves of the plants are still green, but the husks are beginning to turn yellow and the ears well dented. It is also necessary to select the corn before danger of freezing, as it contains quite a little water before being dried and would be injured by freezing.

You can't get a boy to listen to reason merly by shouting it at him.

THE CHILDREN'S HOUR

The Little Brown Door.

"Sister Meg, how many people live in this wall besides you and brother Jim?" asked Sylvia, who had come from the country for her first visit to her married sister, who lived in the city. "I think I should rather live in a house, the way country people do."

"What do you mean, you funny little Sylvia?" asked her sister. "I don't see any wall. We live in a house just as everyone else does."

But Sylvia has never seen houses so close together that they joined one another without even a strip of grass between, and so she kept on calling each long row a wall.

A day or two later, when she was skipping rope with Evelyn Worth, who lived in the same block, Sylvia looked across the street and said, "Evelyn, do you see that little brown door with the tiny window beside it? Aren't they a door and a window in a wall? They don't belong to a house, do they?"

Evelyn wanted very much to laugh, but she was afraid of hurting Sylvia's feelings.

"Oh, yes, they do," she replied. "It's the very smallest house in the street."

"It ought to be a playhouse; I declare it ought," said Sylvia. "Who lives there?"

But before Evelyn could answer, Sylvia's sister called to the girls and asked them to go to market and get some vegetables. They were glad of the chance to visit the interesting market and were soon scampering across the street with a basket between them.

Just in front of the little brown door that they had been looking at, Evelyn stoppped suddenly. "Listen!" she said.

Sylvia stopped too. As she listened her eyes grew wide, for what she heard made her almost believe she was back in the woods at home. From the other side of the little door sounded a sweet, clear bird song, something like the call of the robin, something like the notes of the red-winged blackbird.

She looked at Evelyn. "It must be a bird in a cage—" she began and then was interrupted by a low sound, one that seemed to be half laughter and half speech. Sylvia gasped. "That's a fairy!" she said.

She had often looked for fairies in the woods, but she had never found one. Was it possible that there were fairies in a big city?

Just then a boy came up and lifted the brass knocker on the little brown door.

"O Loy!" cried Evleyn. "Who lives there?"

Loy laughed. "I don't know his name," he said. "Run along to the market, you two. This morning you're buying, and I'm selling."

As the girls hurried down the street Evelyn told Sylvia that the boy was her brother, and that he was selling soap to earn some money to buy a bicycle.

As Evelyn and Sylvia passed the place on their way home Loy was just coming out.

"Hello!" he said. "I was just going to look for you, because you are invited to come in and hear a bird sing and a doll talk."

"Now, Loy, don't tease," said his sister.

"I'm not teasing," answered Loy. "Here, I'll take your basket," he added. "Come on."

They followed Loy through the little brown door into a room. Beside a back window an old man was sitting, with a table in front of him that was cluttered with tools and working material. He looked up with a smile.

"I'll carry the vegetables along," said Loy, "so you girls needn't hurry."

Evelyn and Sylvia stood still; there was no bird to be seen anywhere and no fairy.

"I haven't anything for you to see," said the man. "But there's a good deal to hear. Go to the other window and turn your backs."

Wondering, the girls obeyed. Then all at once a strange concert began. They heard the same bird song that they had heard at first; then came other bird notes, and after that the chirp of a sparrow. Presently both little girls jumped, for they were sure they heard a child speak—one or two little laughing words that they did not quite catch. Then the birds began again.

"Please let us look," Evelyn begged.

But when they looked again they saw nothing except the old man sitting at the table.

"What was it?" they asked in wonder.

"What did it sound like?" asked the man.

"Like beautiful birds," Evelyn said.

"And once like a little girl," added Sylvia.

The old man smiled. "That's fine," he said. "I was hoping you'd say that."

Then, as his two visitors looked at him in surprise, he added, "Now I know that my work is good. This is my work, you see—to make certain parts of musical toys."

When Sylvia went back to her sister's and later to her own home she kept talking about her visit to the little house.

Then at Christmas came a box from sister Meg. In it was a large talking doll and a little silvery bird. And pinned to the doll's dress was a card that read: "You heard us first last summer behind the little brown door."