Soils and Crops

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Fitting and Showing the Hog.

The fitting and showing of swine is an art in itself quite apart from that of breeding. The careful breeder who prides himself on the breeding and typiness of his hogs need not necessarily be unbeatable in the show ring. In large show classes where the competition is keen, the winning individuals must possess other qualifications than trueness to type alone, and probably one of the most important considerations other than type is what may be called show condition. This show condition is found in its greatest perfection at our larger shows where breeders with years of experience at their backs are in keen competition with one another. For those breeders who are less experienced and who may wish to take a hand in the game a few suggestions at this time may not be averse. Individuals which it is the intention of the owner to exhibit at this fall's shows should be selected at once. This is important if maximum size and development is to be obtained, and every day that this is delayed means that much more of a handicap for the individual in the show ring.

It is impossible to realize the desired results by forcing at the last moment, it being necessary, in order to obtain full development, to bring the individual along gradually. Forced feeding results in excess fleshing, with retarded development of frame, or on the other hand it may result in grossness and lack of quality.

Pasture, supplied with shade from the sun, and also, if available, running water, provide ideal conditions for the hog during the summer. These, combined with a well balanced meal ration fed in conjunction with green feed and skim milk, form a combination that is capable of giving the most favorable results.

The meal ration which is selected for this purpose should be one calculated to develop bone and muscle during the initial stages of the fitting period, and for the latter stages a somewhat higher percentage of fat producing foods should be supplied.

In order to appear to the greatest advantage the skin of the hog must be free from blemishes or roughness of any kind, and present a clear, healthy appearance. One great source of trouble, more particularly with white-skinned hogs is that of sunburn. This can largely be prevented if some protection from the sun, either natural or artificial, is available where the hog may take shelter throughout the hotter parts of the day. These precautions are not sufficient, however, if the skin of the hog is to appear to the best advantage, so washing must be resorted to. It is not sufficient to let the washing go until the day before showing. Some considerable time before the hog is to be shown, at intervals of a few days, a thorough scrubbing with a soft bristled brush, linseed soap, and clean water are advised in order to clean the dirt out of the pores. Cleanse with clear water, and carefully remove all soap. Such treatment results in the freshness and bloom that is so attractive and desirable in show hogs.

Frenquent handling of the hogs is necessary in order to have them accustomed to the presence and also submit to the will of their attendant without undue disturbance.

Management of Young Turkeys.

It is at hatching time that we appreciate having saved the tame pullets for breeders. The typical turkey hen resents interference, but the tame one is willing that we share her responsibility and is one of the greatest factors of success in rearing the young. She will allow us to take the little ones from the nest or to feed and care for them without becoming nervous and cross.

When the hatch is completed she should be kept from wandering away as she is instinctively inclined to do, and I have found the following method most satisfactory:

Take the hen and little ones carefully from the nest to the house which is ready for them. This is a good roomy, well ventilated house, the dimensions of which should not be less than three feet by four feet, and four feet high at the front.

Then tie a strong soft cloth to the shank of the hen and to this tie six or eight feet of clothesline. This is fastened to a weight (an old plow point is good) which is placed just outside of the house. After putting her down keep the little poults at a distance until she is accustomed to being tied. She will soon quiet down, call the little ones to her and make the best of the situation. She can go in and out of the house and can be removed to fresh, grassy places during the day, but is shut in with a wire netting door at night and during storms. After a week or ten days she is given her freedom but is brought back to the house at night and in stormy weather until they are old enough to roost. See that the house is kept clean and dry.

First feed is given when from twenty-four to thirty-six hours old. This is dry bread ground fine and mixed with hard-boiled egg. Feed four times daily, just a little at a time. After three days begin giving rolled oats once a day at first, and later alternately with bread and egg.

When about one week old start feeding a good grade of chick grain, sometimes adding cracked wheat.

At about this time, also, a mash is added to the ration for the morning meal and is made as follows: Finely chopped greens (onions, lettuce or dandelions), mixed with bread and egg and with rolled oats. A small amount of granulated charcoal may be added at times. Gradually discontinue the egg and bread and add more of the rolled oats and some bran to the mash.

Never prepare more than you want to feed at one time and never feed more than they will clean up quickly.

Continue this mash, chick grain and rolled oats, feeding four times daily for the first month or six weeks, or until they are ready to go away on range.

They are very fond of lettuce when taught to eat it from your hand.

Sour milk, thick clabbered milk, is a valuable part of the ration. Start giving when three or four days old and continue through the season. Let them have all they will take twice a day. See that they have a supply of fresh water at all times.

Never overfeed. The amount given should not be more than they will clean up thoroughly in three or four minutes.

Feed on clean boards or trays and provide grit (coarse sand), oyster shell, and charcoal where they can reach it at all times.

Poultry

Fine powdered charcoal is useful in keeping down digestive troubles in chicks. It can be bought for about five cents per pound at feed stores or made by running charcoal through a feed grinder. If the charcoal is stored it must be in a rather dry place. It soon absorbs moisture and then loses much of its value to the chicks.

Eye troubles and colds among growing chicks result from overcrowding in dusty brooder houses. As soon as the brooders are removed it pays to install roosts. Even if a few crooked breasts should result from early roosting they are less loss than an epidemic of colds.

Most poultry troubles can be prevented. A great many of them are difficult to cure. There is often a tendency to neglect the poultry and then expect to give them a couple of pills and have everything all right. Successful management of hens consists in anticipating trouble and avoiding it before it occurs, by careful management.

Growing chickens need shade where they can rest during the heat of the day. If the birds are in fenced yards it pays to start sunflowers or corn just outside the fence so the shade will reach inside. A double yard is still better. Then a growing crop is easily started on one side and the hens can be turned in when the plants are too large to be injured.

If you provide artificial shade for the chicks be sure it is substantial. They may seek such protection in severe wind or rain storms. If it blows over there may be a serious loss. Colony houses and brood coops can be protected in wind storms by driving down two by fours or strong stakes and spiking to the sides of the houses.

A windbreak of evergreens is very useful on the poultry range during hot weather. Poultry dislike the hot dry winds. Often the windbreak is difficult to start all in one year as some of the trees may die. It pays to fill in the vacant places for a year or two until the solid line is well established.

Sheep Notes

The wool situation has improved materially of late. This market is tending upward and producers are realizing more from their flocks than they have these past two years. This does not mean, however, that rejects and improperly prepared wool will not sell at a heavy discount below clear wool. It is, therefore, more important to the farmer that he exercise care and judgment in getting the fleeces ready for market. Here are some suggestions:—

Be certain that the fleeces are dry before the shearing is started.

Provide a clean, well-swept floor for the shearers.

Often fleeces are damaged by the shearers cutting the fibre twice instead of once as they should.

After the fleeces are removed the taggings should be separated and placed in a sack or bundle by themselves.

Each fleece should be tied separately with weathered side down. Use paper fleece twine. Do not use binder twine, nor any other rough twine, since the fibre will mix with the wool and cannot be separated in the manufacturing processes. Use no more twine than is necessary, two strings each way around the fleece being sufficient.

Sack the wool or cover it with burlap or canvas and store in a clean dry place.

Morocco has no newspapers.

Horse Sense

Clipping horses has been practiced in our section for a number of years with varying success. The horses are in some cases clipped closely over their entire bodies with a power machine, and it is claimed that this facilitates shedding and produces greater comfort for the horses during the spring months when they are required to do heavy work in warm weather. However, in some cases it has resulted in some sickness and death of horses because of colds and pneumonia contracted when standing in a cool place after being warmed up to a considerable extent. The lighter breeds of horses, including trotting and driving horses, seem to fall in this class, but it is possible that draft horses, too, are affected just as much.

A system used in some places is to clip the legs and about one-half of the body of the horses, leaving the sides and back covered with the original coat of hair to be disposed of in natural shedding. This appeals to many farmers because it leaves the legs of the horses clean and the hair does not hold so much dirt when the legs get muddy. Clipped in this manner the dirt is easily brushed off and the horses relieved. With the half-and-half treatment a heavy draft horse cannot cool off so quickly, even though warmed up considerably and there is less danger from sickness.

While this style of clipping presents a rather odd appearance, it is not long until the top coat begins to shed and with good rubbing and currying the difference is soon unobservable. The benefits of clipping have been secured without any disastrous effects.

Annual Agricultural Returns of Canada, 1922.

Farmers throughout Canada are reminded that this month (June) the Dominion and Provincial Governments will make their annual collection of the areas sown to field crops and of the numbers of farm animals alive on the farm. For this purpose, following plans which have been in annual operation since 1918, a simple cardboard schedule, with instructions signed jointly by the Dominion Statistician and the Deputy Minister or other officer of the Provincial Department of Agriculture, will be issued to as many farmers as can possibly be reached through the agency of the teachers and children of the rural schools. The returns received, when compiled, will form the basis for the estimation by provinces of the areas sown for 1921 to the principal field crops and the numbers of farm animals alive on the farm at the date of enumeration on or about the 15th of June.

The returns thus requested by the Dominion and Provincial Governments are intended solely for the purpose of estimating agricultural and live stock production, first in the interests of the general body of Canadian farmers; secondly for the information and guidance of other interests allied to and dependent upon agriculture (interests represented by statesmen, economists, bankers, grain dealers, transportation agents and others); and thirdly for reporting to the International Institute of Agriculture at Rome (to which Canada is an adhering country) in return for reports on the production of other countries and of world totals which influence prices, and consequently affect the interests of Canada, now the third largest wheat-growing and the second largest wheat exporting country in the world.

Farmers who do not receive the cardboard schedules for returning their acreages sown and their numbers of farm live stock by the middle of June should make immediate application for same to either the school teacher of their local school district, or the Department of Agriculture of their province (in Quebec the Bureau of Statistics at Quebec), or the Dominion Statistician at Ottawa. Positive assurance is given by the Dominion and Provincial Governments that the returns asked for are not used in any way for purposes of taxation. Only totals are used for the purposes of estimation, and all individual returns are kept inviolably secret. In cases where farmers may prefer to do so, the returns may be mailed free under seal direct to the Dominion Statistician at Ottawa, no postage stamps being necessary.

Sugar Beets in Europe.

The producers of sugar beets in this country will be interested in the outlook for the production of this crop in Europe. An official statement has been issued to the effect that the heavy producing countries across the Atlantic at the last moment are curtailing their spring sowings of the beet crop.

This curtailment is due to a number of causes. Bad weather in some sections is delaying seeding to an extent that producers are giving over a portion of their acreage to other crops. High potato prices have stimulated the planting of that crop to the detriment of the beet crop in the Netherlands, Belgium and Denmark. In Germany there will be no increase in the acreage over last year because of a shortage of farm labor. Italy expects to raise about thirty per cent. more beets than a year ago, but this will just nicely take care of her home requirements and leave nothing for export as was earlier expected. France will increase her acreage around fifteen per cent.

A careful review of the whole European situation makes it appear at this time, according to the department of commerce, that Europe will just about grow sufficient beets to make what sugar she will need during the coming year. This is far different than the expectations were three months ago, when it was figured that the aggregate production of sugar from this season's crop would give a large tonnage for export.

Wood That Won't Burn.

Enormous sums of money are lost every year through fires.

Experts declare now that much of this loss might be avoided if fire-resistant paint were used more generally on woodwork. It costs no more than ordinary paint, and reduces the risk of the article it covers catching fire. It is manufactured from various chemicals, among them being ammonium phhosphate and bicarbonate of soda.

We become agitated about taxes but the biggest tax we put upon ourselves and make no complaint. That tax is negligence and its results.

Parents as Educators

Companionship With Children—By Katherine Beebe

Too much cannot be said concerning a real companionship between parents and children. I emphasize the "real." Those fathers and mothers who have practiced this companionship through their children's unfolding years seem almost to hold them in the hollow of their hands. Those fortunate young people simply do not want to do the things which would grieve or distress the ones they love best, and in addition are so well equipped with vital interest in the better and finer aspects of life that the less desirable makes no effectual appeal. I have seen this happen over and over again, and one mother of five splendid children said it was as certain as that two and two made four. Given this real companionship by their parents and a mutual sharing of the best things in home, books, music, art, nature and humanity during eighteen or more plastic years and children are bound to turn out well.

This sort of companionship is no casual or haphazard thing. The parents who realize its value and mean to have it at any price are willing to play, really play with their babies, to keep on playing with the little ones, to give hours of time to the older ones, and to live on such friendly terms with their children from the beginning that spontaneity, originality, initiative and enthusiasm are never repressed. Tender love, real living sympathy with the child's point of view, active participation in whatever interests him, doing things together, these are the precious secrets of those parents whose children when grown are still their dearest friends.

It is from the first a question of being willing to pay the price. When one sees on every hand boys and girls whose friends and interests are all outside of home, who seem entirely at liberty to choose their own occupations and amusements and inclined to select those which are not only questionable but often desperately dangerous, and contrasts them with those others of whom we have been speaking, one is forced to conclude that many parents have purchased self indulgence for themselves at a terrible cost. **"Where are their parents? What are they thinking of?"** How often do we hear this said to-day as we gaze upon the girls and boys who are on the streets, in the restaurants, at the shows, in the automobiles; as we read the horrors in our daily papers, as we listen to tales of disgrace and disaster.

It does not matter much where they are now. It is too late. Their great chance is gone for good and all. But years ago these parents were spending hours upon themselves which should have been passed in companionship with their children. What would they not give now for that companionship and the influence which can be bought only at that price!

But, oh, you fathers and mothers of little children, don't let your opportunity slip! Now is your great chance! Fill the golden hours of your children's early years with all sorts of work, play, projects, excursions, reading and study together. Live with your children. It was long ago that Froebel cried, "Come, let us live with our children!" and never was his reason for so doing so clear to our minds as in these latter days. Do not say that you are too busy, or that the labor of providing food and shelter for them prevents. Let them share, according to their years, in the family work, the family respensibilities and even the family income. Remember that companionship means participation. You can make work a frolic or an unwelcome drudgery to them; it is for you to choose. All depends on the spirit in which the necessary things are done. Even be thankful that your means are restricted, for then your problem will be a simpler one than if you had all the money you wish you had. Necessity is an able assistant to any sort of teacher, and besides it is you the children want rather than the things you think you would like to give them.

THE SUNDAY SCHOOL LESSON

JUNE 11.

Jeremiah Cast Into Prison, Jer. 38: 4-13. Golden Text—Be not afraid because of them; for I am with thee to deliver thee, saith the Lord.—Jer. 1: 8. (Rev. Ver.)

Lesson Foreword—It is necessary to understand the historical background of this lesson. The Babylonians had carried Jehoiachin, king of Judah, and many of his nobles into exile in B.C. 597 and had set up his uncle, Zedekiah, to rule as king of Judah under them. A strong national party in Judah urged Zedekiah to revolt against the Babylonians but Jeremiah strongly advised against it. Zedekiah, however, after a time did renounce his allegiance to Babylon and revolted. The Babylonian army came up against Jerusalem in B.C. 588 and besieged it for about two years. Jeremiah was in Jerusalem throughout the siege, but during a lull in the operations, he attempted to leave the city for his home in Anathoth. He was arrested by the guard on the charge that he was deserting to the Babylonians, but the real cause of his imprisonment was that he was considered an inconvenient and dangerous person. While he was in prison, the king sent for him to see if he had any revelation from God. Jeremiah replied that the king would be delivered into the hands of the Babylonians, but requested that he should be released from imprisonment. Zedekiah then transferred him from the dungeon to the court of the guard, and made provision for his maintenance.

I. Jeremiah Imprisoned, 4-6.

V. 4. **The princes**; for their names see v. 1. They were military officers and civil officials of high standing. **The king**; Zedekiah. **Let this man be put to death.** The request of the princes is intelligible. They had heard Jeremiah, while in prison, announce, on the authority of God's Spirit, that the defence of the city was useless (1-3); such an announcement tended to weaken the fighting spirit of the garrison. So if the city was to be defended to the last extremities, the prophet of disaster must be effectually silenced.

V. 5. **He is in your hand.** The king yielded to their request by delivering Jeremiah over to them; they were, in any case, the proper officials of justice (26: 10-16). The king, however, did not explicitly permit them to inflict the death penalty. **For the king. . . . against you.** The king would doubtless have released Jeremiah had he been able. But the king does not appear to have been a strong character; he was the tool of his princes. He also seems to have had a secret regard for Jeremiah and had consulted him while he was in prison, 37: 17-20.

V. 6. The princes were afraid to kill Jeremiah outright, since he was a prophet. So they hit on another plan and cast him into a dungeon to die of starvation and neglect. **The dungeon;** in reality a cistern attached to the house of one of the princes. Each house had usually its own underground cistern in which water was stored for use during the dry season. This cistern had no water in it, but its bottom was slime and mire. Joseph was thrown into a pit by his brothers (Gen. 37: 24), and again by Pharaoh (see Gen. 40: 15). Often the meanest of the prisoners were confined in a pit rather than the common prison. (See Gen. 37: 24.)

II. Pleading for Jeremiah, 7-9.

V. 7. **Ebed-melech;** an Ethiopian and, therefore, a negro. He was, in all likelihood, the chief of the king's personal servants and in charge of the royal harem. "It is very striking that the only one who intervenes to save Jeremiah from the terrible death, the princes designed for him, was an Ethiopian eunuch" (Peake). **The gate of Benjamin;** was the gate on the north side of the city which led into Benjaminite territory, ch. 37: 13. The king was there directing the defence of the city and during his absence from the palace, and without his knowledge, the princes had committed Jeremiah to the dungeon.

V. 8. **Ebed-melech went forth;** from the royal palace on the southeast side of the city, to the gate of Benjamin on the north side, where the king was watching the military operations.

V. 9. **These men have done evil.** The conscience of Ebed-melech revolted against the treatment meted out to Jeremiah by the princes. Until Ebed-melech informed him, the king knew nothing of what had happened to Jeremiah. "Zedekiah had not intended the prophet's death, and his answer to the princes (v. 5), was merely meant as a permission to silence him" (Peake). **He is like to die for hunger.** The king had previously granted Jeremiah a daily ration (37: 21) which was scarcely sufficient to keep him alive. Owing to the siege, bread had become very scarce, and in the cistern Jeremiah would miss even the small ration apportioned to him by the king.

III. Jeremiah Rescued, 10-13.

V. 10. The king proceeded with all urgency to save the life of the distressed prophet. He appeared throughout to be on the side of Jeremiah.

V. 11. **The house of the king under the treasury;** a storeroom under the royal treasury. **Old cast clouts and old rotten rags.** Notice the fine thoughtfulness of Ebed-melech. He wished to spare Jeremiah needless pain, by wrapping the rags around the cords so that he would not be cut by the rope when he was drawn up. **Let them down by cords;** another instance of his thoughtfulness. Jeremiah would not have to grope about the dark pit for the rags.

V. 12. **Put . . . under thine armholes.** Jeremiah was not to be raised by sitting on the rope, because by that method he might have fallen, owing to his faintness from hunger. The rope was tied around his armpits, which were protected by the rags, and the strong men above hauled him out of the horrible pit.

V. 13. **In the court of the prison.** Because doubtless, of pressure from the princes, Jeremiah was not allowed to go scot free. He was returned to his former prison, 37-21. This was not the common prison, but one of the rooms in the guardhouse which was attached to the palace. Here was kept, not the ordinary criminals, but those whom it was expedient to keep under restraint and observation.

Application.

Jeremiah at the bottom of the miry dungeon was not without a friend. Ebed-melech, a black servant of the king heard that Jeremiah had been put in the dungeon, so he went to the king and pleaded for the life of the prophet, who was in danger of dying of starvation. Permission was granted for the release of Jeremiah, through the intercession of this humble slave, who had sufficient influence with his master to have the wishes of the princes countermanded.

When Sir Walter Scott was building Abbotsford he put the bowling green in a peculiar place. And at one corner of it he built a little summer-house where he might sit of an evening after dinner. And he told Lockhart why he built it there; was it because the view was beautiful? Not so, but that he might sit and listen there to the evening worship of his coachman. Old Peter was a real old Scottish servant. He would not have talked religion for the world. But every nightfall in the year he took The Book, and "waled a portion wi' judicious care." And then the psalm was raised and, traveling heavenward to him who understands our Scottish reticence, Sir Walter heard it and, hearing it, was comforted. Old Peter was preaching better than he knew. He was preaching when he never thought to preach. That is what all of us are doing constantly, though we were never in a pulpit in our lives. There are Spurgeons in unlikeliest places—Dr. Parks in the coachman's cottage—apostles who are cheering all the prison, and they never know that they are doing anything.

Increase of Cow Testing.

The cow-testing system as a means of establishing the production of individuals in the dairy herd was more generally adopted in 1921 than in any previous year, according to the official returns of the Dominion Dairy Commissioner. The credit for this is due in no small measure to the co-operation of the Agricultural Representatives and provincial dairy instructors with the Dominion Department. As some farmers who undertook the work did not make returns, while others had their milk tested at the cheese factories, the figures given out cannot be said to be entirely comprehensive of the amount of testing carried on. These figures as a matter of fact do not more than cover the returns from the various centres which are under the control and supervision of the Dairy Branch. They show that in Ontario in 1920 there were 446 herds and 4,911 cows reported on, and 20,835 tests made, and that in 1921 there were 767 herds and 9,373 cows brought under the system, and 39,557 tests made. There was a similar increase in Quebec, in which province official cow-testing has made enormous strides in the past three years, the system in 1919 including 1,046 herds and 10,374 cows, and in 1921 no fewer than 3,499 herds and 32,225 cows, the tests made in the latter year at the 473 centres numbering 127,462 against 42,228 in 1919. Manitoba had 176 herds and 1,173 cows under test in 1921 compared with 78 herds and 580 cows in 1920. The totals for the whole Dominion, excluding Saskatchewan, which province has undertaken the entire work itself, were 5,194 herds, 47,895 cows and 194,747 tests last year, compared with 3,776 herds, 32,714 cows, and 136,263 tests in 1920. The work generally is having a beneficial effect in increasing the average production both of milk and fat by weeding out unprofitable cows, using better feeding methods and keeping better sires.

The policy pursued by the Dairy Branch was the same last year as it has been since 1918. Farmers are required to supply the necessary equipment for weighing the milk and to keep samples for three days during each month. The Branch, through the dairy promoters of each province, organizes and supervises the testing centres and compiles the records received at the Ottawa office. The report urges the formation of cow-testing associations and also points out that, in order to achieve the best results, along with the milk record, the feed record of each cow should be kept. For this purpose the Branch will supply the necessary blank forms free.

It is inconceivable that farmers who know the value of milk for their calves and pigs cannot see the application of this to the children. Every child under 15 years of age should drink at least a quart of milk every day, and after that age, a pint every day.

These chemicals are also used to protect furniture. They are forced into the wood under an air pressure of a hundred and fifty pounds to the square inch, but the process has the disadvantage of being a costly one.