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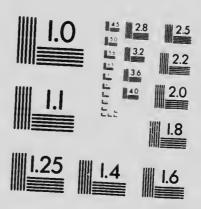
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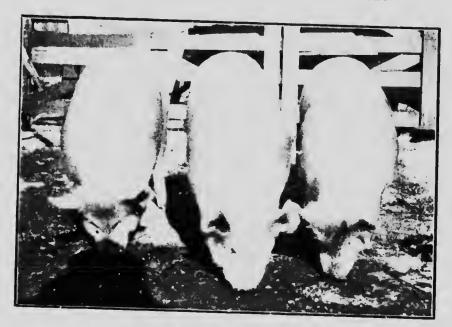
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HOG RAISING IN MANITOBA

By W. H. PETERS, B.S.A., Professor of Animal Husbandry



Manitoba Agricultural College

Winnipeg, Canada

ANIMAL HUSBANDRY DEPARTMENT

MANITOBA AGRICULTURAL COLLEGE Winnipeg, Canada March, 1913

TO THE HON, GEORGE LAWRENCE Minister of Agriculture and Immigration Winnipeg, Manitoba

Sir: I beg to present herewith Bulletin No. 7 of the Manitoba Agricultural College, entitled "Hog Raising in Manitoba," by W. H. Peters, B.S.A., Professor of Animal Husbandry.

This publication is being issued in response to numerous inquiries for information on this subject. I have about that it will prove of great interest to the fare this Province.

Yours very truly W. J. Black President

Hog Raising in Manitoba

During the past few months so many letters, asking questions about the growing of hogs, have been received by the Department of Animal Husbandry, that it has been thought advisable to publish for distribution a brief treatise on this subject. This awakening interest in hog raising is an indication that farmers are beginning to realize the value of the hog in utilizing the low grades of grain produced on the farm.

STATUS OF THE SWINE INDUSTRY IN THE PROVINCE

As yet the growing of hogs is practically an undeveloped industry in the West. A very few farmers have been raising hogs more or less extensively for a number of years, but on the large major ty of the farms, the sale of hogs as any appreciable part of the proceeds from the farm, is unknown. As shown by the following table, the number of hogs in the Province of Manitoba habeen steadily increasing during the past six years:

Year	No. of hogs	Year	No. of hogs
1907.	118,243	1910	176,212
1908	120,364	1911	192,386
1909	155,541	1912	216.640

Even though there has been an increase from year to year, the number of hogs in the Province at present is exceedingly small compared to the magnitude of other agricultural industries in the Province.

During the past six years there were marketed in Winnipeg live hogs as follows:

Year	No. of hogs	Year	No. of hogs
1907	81,629	1910	91,626
1908	145,269	1911	85,157
1909	128,073	1912	110.781

It must be remembered, however, that a considerable number of the hogs received in Winnipeg are from Saskatchewan points, and also that the number received does not take account of the vast number of hogs that are slaughtered by farmers themselves and by local butchers in the smaller towns. Yet, since Winnipeg is practically the only public live stock market in the Province, the small number of hogs received here does indicate that the average farmer of the Province is not raising hogs on a commercial basis.

In addition to the number of live hogs received in Winnipeg. hundreds of car-loads of dressed pork have been imported during each of the past six years to supply the demand in the city, and also in the towns and cities throughout the West. During the past three years, particularly, there has been a lamentable shortage of homegrown pork in the country, and with prices as they have been, the wonder is that more farmers have not taken up the growing of hogs more extensively before now. Possibly several explanations can be offered as to why farmers have not taken up hog raising more extensively. The first and most important reason has been the general disinclination on the part of farmers to erect the necessary buildings and care for stock of any kind on their farms. No doubt there have been times when a lack of knowledge on the part of the farmer as to the needs of hogs in care and shelter, or else neglect of them, has led to a loss instead of a profit, and discouraged many. Also in years gone by prices have fluctuated considerably, resulting in an unsteady market, and some hog-growers have suffered on that account.

Disregarding the past and considering the present and future, however, the signs of the times read more optimistically for the man who will take up hog raising and give it serious consideration and careful attention.

The climate and feeds of Manitoba are such as to offer no great obstacle to successful hog raising. The present demand of the market for pork as well as breeding hegs far exceeds the supply. With the rapid growth of the West, the demand for pork will constantly increase. Most of the pork that is imported has and will continue to come from the corn-belt states; at present the hog markets in the corn-belt states are facing a shortage of pork and high prices. When we consider the added cost of freight and duty on imported pork, we find that the Maritoba packer can pay, has been and fill continue paying from one to two cents per pound more for live hogs in Winnipeg than the quotations at the leading markets in the United States.

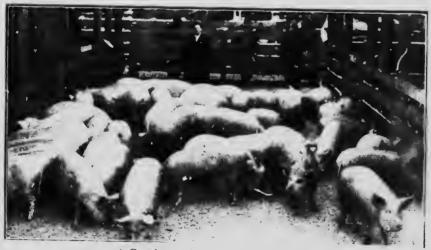
In view of these facts, the only cause that could lead to greatly reduced prices for live hogs in Manitoba within the next few years would be for a large number of the farmers in the Province to take up hog raising extensively at once, and this is not probable. It stands to reason then that the farmer who will go about the raising of hogs in earnest, stands to make very respectable profits, if he will but treat the hogs fairly.

THE SELECTION OF BREEDING ANIMALS AND METHODS OF BREEDING

The selection of the type and breed of hogs best suited to the conditions on one's farm is sometimes a perplexing question, because so much conflicting advice is available on the subject. In the selection of any type of animal, when large profit is the end in view, the first

consideration must always be the market demand. With conditions as they are in Manitoba at present, the market is neither very strict nor discriminative as to type. It is true, though, that a hog with a long body, a deep side, smoothly finished and caching the market at from 190 to 225 pounds in weight, will always command the top price of the market, and one aiming to produce market toppers will do well to select breeding animals of well-defined bacon type. On the other hand, hogs of the shorter, broader-bodied type, if of good quality and properly finished, will command just about as high a price as first-class bacon hogs, and it is claimed for them that they are quicker and cheaper feeders. It is safe to say, though, that with a larger number of hogs marketed each year our packers would soon discriminate more in favor of the prime bacon hogs.

So far as suitability to climate and feeds is concerned, any of the breeds of hogs, bacon or lard, are suitable to climatic conditions in Manitoba, and as to feeds, the same is practically true. It is only fair to state that the bacon breeds are, as a rule, a little better rustlers than the lard breeds, and where large bush pastures are to be used for pasturing hogs in summer, this might be a small point in favor of



A Car-load of Choice Bacon Hogs

Photo by courtery Nor'-West Farmer

the bacon breeds. A point to be considered in the selection of a breed is the personal likes of the man choosing the breed. If, for some reason or other, he is convinced that the Berkshire breed, for instance, is the best breed, he will do well to select that breed. Yet where farmers select breeds entirely from the standpoint of their personal likes and dislikes we soon get a great variety of types and breeds in every locality, and where this condition exists we never get the same degree of uniformity and excellence in the hogs produced

as would result were all the farmers in one district to select and raise the same type of hogs. The advantages of all the farmers in one district raising the same type of hogs are as follows: First, the district will scon develop a reputation for producing large numbers of hogs of that breed, and prospective purchasers of breeding stock will go to the district to buy, knowing that they will have large numbers to select from; second, individual breeders in the district may buy good, high-priced boars and interchange them with their neighbors when no longer useful to them, thus eliminating the necessity of sacrificing a good breeding boar for pork because of the lack of a market for him; third, the breeders of the district can easily club together and gather stock for a public sale; fourth, when a car-load of hogs is made up for shipment to market from that district, they will be uniform in color and type and command a higher price than if they were made up of three or four different types and colors, as is so often the case now with car-loads of hogs coming to market.

The above pertains chiefly to the breeding of pure-blood hogs, and while usually that will prove the most profitable method of raising hogs to the farmer, it is by no means the only practical or profitable type of breeding that may be followed.

The three methods in most general use are pure breeding, cross-breeding, and grade breeding. Pure breeding has as its advantages: First, that higher prices may be secured by selling at least a part of the produce for breeding purposes and thus greater profits secured from a small herd; second, greater improvement can be secured through pure breeding than by grading or crossing; third, in pure breeding there is less chance for variation, and greater uniformity will be evident in the produce of the herd.

The only ¢ sadvantages of pure breeding as compared to grading or crossing are: First, a little more capital is required to purchase satisfactory breeding animals at the beginning; second, a knowledge of the breed characteristics is necessary to enable the breeder to select animals of correct type and markings.

A type of breeding that is perhaps more in use among swine breeders than with the breeding of any other class of animals is cross-eeding. This implies the mating of a pure-blood boar of one breed.

pure-blood sows of another breed. Usually a boar of one of the nard breeds is crossed with sows of one of the bacon breeds, the object bacon breed with a little of the width, depth of hind flank and greater feeding capacity of the lard breed. This practice has proved quite successful in producing first-class feeder hogs. It has as its chief advantage the fact that the mixing of two breeds entirely distinct usually gives renewed vigor, vitality and feeding propensities to the offspring. It has as its disadvantages: First, that the cross-bred animals do not prove satisfactory breeders, and must all be marketed

for pork, or profits in succeeding years will decrease; second in following this practice, a herd can not be built up, and the breeder it at pure these new breeding animals every two or three years. Cross-breeding part be practiced to greatest advantage with a group of second-rate, cheap,

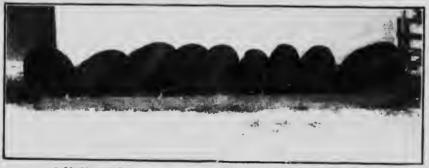


A Car-load of Choice Lard Hogs

Photo by courtesy Nor'-West Farmer

pure-blood sows, when by using a good boar of a different breed on them the pigs will often be better than if they were bred to a boar of the same breed as themselves.

A third type of breeding that proves very successful is the practice of grading up a herd. This implies beginning with a group of rather common sows of any breeding, and mating them with a pure-blood boar of some well explained blished breed. It implies, then, the continued use of pure-blood by of the same breed year after year. It will readily be seen that this practice will tend to make the offspring of the herd more nearly pure-blood with every generation, and in time



A Uniform Group of Berkshire Barrows Ready for Market

a herd may be developed that is practically pure-blood, though the animals in it can never be registered as pure-blood because there will always remain in each animal produced in the herd, a trace of the mongrel blood possessed by the first sows used.

Grade breeding has as its chief advantages: First, that less capital is required to purchase foundation sows than is the case with pure-bleeds; second, less care and judgment are required in the selection of breeding animals; third, it is the quickest possible means of securing improvement for the first few generations at least.

The chief objections to grade breeding are: First, that animals produced in a grade herd will not attract high prices as breeding animals; second, no matter how good they may become or how like pure-loods they may come to appear, they can never be registered and sold as pure-bloods.

HOUSING

Whichever type of breeding the farmer chooses to follow, the principles involved in the care, feeding and management will be very similar. The amount and kind of hog houses and fencing that will be required will depend largely on the number of sows bred each year, and whether the policy of one or two litters per year is to be followed. There are two main systems that may be followed in housing hogs. The one might be called the "Colony System," and the other the "Centralized System." The colony system implies the keeping of hogs in small groups in small, movable houses, each house having its own pasture lot and constructed large enough to accommodate oue or two sows with their litters. The colony system is particularly suited to Southern conditions. Where only one litter per year is raised, hogs might be managed by the colony system quite successfully in Manitoba. If this system is used, however, the sows should be bred not to farrow before May 1st, or there is a likelihood of too great losses of young pigs from the cold in the spring of the year at farrowing time. The young pigs will then be ready for market in the fall before the rough winter weather sets in, and the brood sows can be wintered over in the small cots.

By the centralized system is implied a large central hog house in which all of the hogs are kept either in winter or throughout the year. Where fall pigs are to be raised in Manitoba, the centralized system must be used. When one has a suitable large central hog house there is no reason why two litters per year can not be raised with considerably more profit than when just one litter is raised. It is not the intention in this Bulletin to discuss the construction of hog houses at any length. There are many types of central hog houses that will be found satisfactory, and there are many types of the small colony house also. The chief essentials in the construction of a large hog house are that it be built with the floors high enough above the ground level so that they may be well drained and kept dry. It must be fairly will strike nearly all parts of the interior at some time during the day. Thorough ventilation is another essential and can only be provided

by proper inlets and outlets which can be partially closed or opened, according to the condition of the weather. Whatever style of piggery is constructed, convenience in the arrangement for feeding and an casy means of removing the manure should be given every possible consideration.

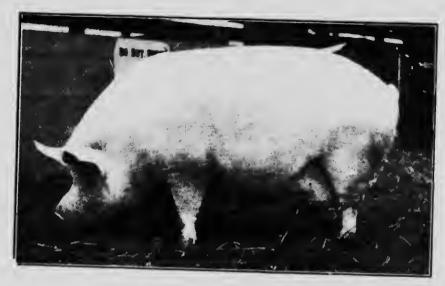
Where hogs are to be wintered in the small cots, they should be provided with swinging doors so that in the very coldest weather the doors can be dropped down to help to keep the sleeping place warm.

CARE, FEED AND MANAGEMENT OF THE BROOD SOW AND LITTER

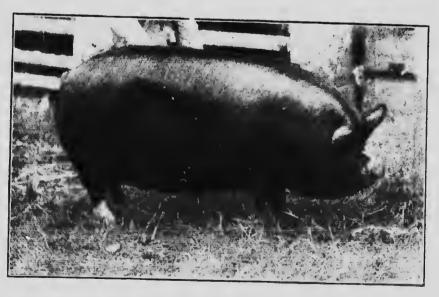
In raising two litters of pigs per year from a sow, she should be bred at least as early as some time between the dates of December 15th and January 1st, so as to farrow between the dates of April 1st and April 20th. If sows are bred to farrow this early, though, they must be given a warm pen in which to farrow or large losses will result. Yet in raising two litters it is necessary to get the first litter weamed fairly early so that the sow may be bred again in order to get the fall litter farrowed and started so that they will be old enough and strong enough to stand the cold weather when winter sets in, or else large losses of young pigs will be experienced through the winter. Brood sows will very often come in season at three to five days after farrowing. and some hog-growers prefer to breed for the second litter at that time simply in order to get them early in the fall. The wisdom of breeding so soon after farrowing is questionable, however, and it will usually be found more satisfactory in the end to mate for the first litter in the spring a little earlier, and then wait to rebreed the sows until immediately after weaning the pigs. In this way the fall litter can be farrowed by September 15th to October 1st, and this will give them a chance to get a fairly good start before the cold weather comes.

If but one litter a year is to be raised, the object will be to produce them as cheaply as possible and with as little care as possible, and they may better be farrowed from May 1st to 15th, as then there will be no danger to the young pigs from the cold weather and they will require much less attention than if farrowed earlier.

Brood sows may best be wintered largely out-of-doors and fed its such a way that they will be required to take considerable exercise. Sows will almost take care of themselves as far as feed is concerned if they are allowed the run of a straw stack. In the winter feeding of sows, care must be taken not to overfeed and allow the sows to get too fat. This frequently happens with sows that are wintered in large piggeries. They become accustomed to the warm piggery and simply will not go out to take exercise unless compelled to do so. The sow that is kept out-of-doors with only the protection of a straw stack



A Choice Yorkshire Sow



A Choice Berkshire Sow

or a small hog cot, and is forced to take exercise and keep moderately thin in flesh, will invariably produce a stronger litter of pigs in the spring than the sow that is wintered indoors in a warm piggery, taking very little exercise and becoming too fat.

For the winter feeding of brood sows in Manitoba, oats will prove the most satisfactory grain. They may be fed whole and either dry, soaked or cooked, or they may be crushed and fed dry, soaked or cooked. They may be fed with good results when used as the only grain feed, but better results can sometimes be had by feeding some other grain with them, and the ration may often be cheapened by composing one-fourth to one-third of it of barley, frozen wheat, field peas, bran or shorts. As a rule it will not be found entirely satisfactory to replace more than one-half the oats with any other feed, as the barley, wheat, peas and shorts particularly are too fattening and lacking in the muscle and bone-building material that is required by the sow if she is to build up a strong litter of pigs. Practically the same results will be obtained whether the meal is fed dry or made into a mash with warm water. If fed wet it should be fed warm. Roots should be fed very sparingly to brood sows during the period of pregnancy as they tend to produce soft, weak pigs if fed heavily. Mangels may be used to very good advantage to the sows after farrowing in the spring and before the grass becomes good. If alfalfa hay is available and can be cut with a hay chopper, the ration for the broad sow in winter will be improved and cheapened by using ten to twenty per cent. of the cut alialfa in the ration.

The sows should be placed in the farrowing pens from five to eight days before they are due to farrow, and each sow should be given a separate pen. The feed should be cut down a little from then until the sow has farrowed, as heavy feeding just before farrowing leads to a feverish, restless condition and aggravates any tendency the sow might have to caking of the udder. It is at farrowing time that sows and pigs require the very closest of attention, and as that is about the only time they do require close attention, it should be given them. For two or three weeks while the sows are farrowing, an attendant will need to be with them most of the time. The pigs should be removed from the sows as they are farrowed, dried with a sack or cloth, and placed in a box or barrel with straw in the bottom of it. They should be kept away from the sow until she has finished farrowing, when they may be returned and should be watched for an hour or two until the sow settles down with them. Some of the weaker ones may need assistance to nurse the first time or two. The farrowing pen should be bedded with just a thin layer of short straw so that the pigs will not get tangled up in it and be unable to get out of the way of the sow when she gets up or lays down. A sow should not be fed anything after farrowing except warm water to drink until she shows signs at least of beginning to get hungry, which will usually be about twelve to twenty-four hours after farrowing. For the first feed after farrowing the best possible mixture would be a thin slop of shorts, warm water

and milk. This will make an appetizing feed to the sow and is suitable in every other way. At least five days' time should be taken after farrowing to get the sow back to full feed, which will be from four to seven pounds of grain per day. For a sow that is nursing a litter, nothing will beat a grain mixture composed of about six per cent. crushed oats and forty per cent. shorts, and it may best be fed as a thick slop or mash.

For the first week or so neither sow nor litter will require much exercise, but by the time the pigs are two weeks old it will do them good to be turned out into the runway of the piggery, or else to be turned out-of-doors entirely for a few hours each day. As soon as the grass gets green the sow and litter should be moved out to a grass pasture, and if the pasture is so far distant from the hog house that the pigs can not be turned directly to pasture from it each day, then small, movable cots should be provided to furnish shelter for the sow and litter while on pasture. If plenty of skimmed milk is available, the young pigs should be taught to drink skimmed milk as early as possible in addition to their nursing the sow. Unless pigs are being especially well nursed by the sow they will usually take to drinking milk and eating with the sow when they are from four to six weeks old. The skimmed milk may best be fed clear the first two or three days, but as soon as the pigs are drinking well, some shorts may be added to the milk. The shorts should be scalded with hot water first and the milk added. Young pigs should always be fed a comparatively thin slop, as they relish most something that they suck up rather than a thick mash which they would have to eat. The boar pigs that are to be eastrated should be castrated at least by the time they are five to six weeks old, for the younger they are castrated the less setback they will receive from the shock. In common farm practice pigs are weaned at anywhere between six and ten weeks old. From seven to eight weeks of age is the best time to wean. If they are weaned at six weeks the pigs will show the effects of weaning more than if weaned at seven or eight weeks, and on the other hand if they are allowed to nurse until ten weeks old and the litter contains six to ten pigs, they will drag the sow down in flesh quite badly and gain little themselves.

The best method to follow in weaning the pigs is to remove them from the sow altogether and not allow them to suck once or twice a day for several days, as is sometimes the practice. After the pigs have been removed the sow should be closed off from the pasture and fed a limited amount of grain so as to check the milk flow and assist within three to six days after the litter has been weaned, and they should be watched very closely at this time to see that they are mated during this first period in order to farrow the fall litter as early as or at least given a roomy lot and fed all the green feed they will handle, per sow per day.



A Choice Chester White Sow

Photo by courtesy Nor'-West Farmer



A Choice Poland-China Boar

Photo by cone tesy Nor' West Farmer

Following weaning the young pigs should by all means be kept on pasture and they should be fed during the first month or three weeks at least three times, or better four times, per day, using the slop mixture of shorts, skimmed milk and water. As soon as the pigs are feeding good, some finely crushed oats or barley may be used with the shorts, and by the time the pigs are three months old, one-third to one-half the feed may be composed of oats or barley, and if shorts are high in price, they may be discontinued entirely.

If skimmed milk is not available at weaning time pigs can be quite successfully weaned without the use of it. They should then be allowed to nurse the sows until eight weeks old, and every effort made to get them eating good before weaning. A little whole wheat fed in addition to the shorts slop will be of value to the young pigs, whether weaned without or with the use of skimmed milk. Where pigs are weaned without the use of skimmed milk they will inevitably experience quite a severe setback. Growth will be checked and the gains made during the following month or six weeks will be but about one-half of what they would be when skimmed milk is supplied in liberal amounts at weaning time and for one month following.

Oats make the best possible grain feed for growing pigs from two and one-half to five months old, but if they are scarce, barley, frozen wheat or peas may be used with good success along with some oats. It must be remembered that the cheapest possible gains that can be made with growing pigs through the summer are the gains made on grass and green feed. The wise hog-grower will provide sufficient pasture and green feed so that he will have a plentiful supply for his

hogs during the entire growing season.

For early spring pasture, brome grass is about the best, because it is the earliest and hardiest, though aifalfa or clover makes a better pasture, and mixtures of timothy, blue grass, rye grass and clovers are good. Rape seeded in drills 12 to 18 inches apart makes a good pasture for midsummer, and a mixture of oats or barley and field peas makes an excellent crop to cut for green feed. For late fall pasture peas sown alone are excellent. They can be allowed to practically ripen, and all be a valuable pasture at the beginning of the

FEEDING FATTENING HOGS

Pigs that are to make prime pork should weigh from 180 to 200 pounds at six months old. In order to get them to this weight at the age of six months, it will be necessary to put them on full grain feed at from four and one-half to five months old, then giving them a finishing or fattening period of from four to six weeks. During the fattening period it matters little whether hogs get much exercise or not, and it is just about as well to shut them away from pasture while fattening, as they will make slightly larger gains than if allowed the run of the pasture, and the short period of confinement without exercise after a hog has been running on pasture all summer will not be

sufficient to cause soft bacon, For fattening hogs in Manitoba. extensive use should be made of barley, as it is the most fattening grain we have. Hogs may be finished entirely on barley or some oats or peas may be used with it. The barley can be fed whole by soaking it for twenty-four hours before using, or it may be boiled and fed, or it may be crushed and soaked before feeding. During the fattening period, whether receiving green feed or not, pigs should be fed three times a day and fed just about all the feed they will clear up at each feed. Some roots may be fed, but they tend to produce soft pork. Pigs will fatten best if kept in groups of from six to twelve hogs in a pen, though where they are raised extensively and fed outdoors, they may be fed almost as well in large droves so long as they have plenty of room at the feed troughs. The spring litter of pigs can often be fattened by pasturing on a field of peas that have been allowed to practically ripen before the pigs are turned on to them.

FALL PIGS

When two litters of pigs per year are raised, the same principles apply to the care of the sows and pigs in every particular except that for the most part pasture will be out of the question, and greater difficulty will be experienced in getting the pigs to take enough exercise in the cold weather to keep them healthy. Also more grain will be required to produce a pound of gain, and the gains per day will be smaller than with the summer pigs, and more labor will be required to care for them.

The chief necessary precautions to insure success with fall pigs, are: First, to make sure that the pigs receive considerable exercise every day; second, to make sure that their sleeping quarters are kept dry and well bedded; third, to feed regularly small amounts of some laxative feeds such as oil cake or flaxseed or a dose of Epsom salts in the feed once every two weeks to keep their digestive systems open and loose. Some cut alfalfally or pulped or sliced roots will be very beneficial in this respect also

Fall pigs farrowed from September 15th to October 1st should be ready for market at 200 pounds weight by the first of the following May.

THE MANAGEMENT OF THE HERD BOAR

Usually the homeliest and most neglected animal on the farm is the herd boar. Just why he should be so much neglected is hard to explain unless it is because he is so homely. In the selection of a boar it should be remembered that he will contribute at least one-half the characteristics to every pig produced in the herd, and it is, therefore, of the greatest importance to select a boar of the right conformation, good quality, strong constitution and the desired characteristics of the breed represented. Having selected a good boar, it will pay to give him proper care, which means to see that he is placed in quarters

where he can secure sufficient exercise, and in quarters where the sanitation is good. He should receive green feed in summer, and should never be allowed to become extremely fat. Nothing will be more injurious to a boar than to allow him to become too fat unless it is to turn him loose with a group of sows at breeding time. Sows should be turned in with a boar one at a time when in season, and allowed to remain with him only until they have been served once and then they should be removed from his pen. By handling a boar in this way, as high as forty or fifty sows can be bred by one boar within a period of



A Typical Yorkshire Brood Sow

Photo by courtesy

ten days or two weeks' time. Young boars should not be put in heavy service until they are at least one year old, though they may be used to breed a few sows by the time they are six or seven months old.

PIG TROUBLES

There are comparatively few diseases to which older hogs are subject, but pig troubles often begin when the pigs are a few days old, and their troubles may be many before they have reached a many table age. The mouths of young pigs should be examined when the are from three to six days old to see whether or not the little tooks are grown out long, and if they are they should be broken off

th a small pair of pinchers or they will cause trouble by cutting and scratching the teats and udder of the sow, at first causing her to jump violently at intervals when the pigs are nursing and later they may cause inflammation in the udder and so alter the composition

of the milk that scours will result in the pigs. Scours seem to be very easily brought on in young pigs, and every precaution should be taken to prevent them. Sometimes a change in the feed of the sow will cause scours in nursing pigs. Damp quarters may also cause them and occasionally scours will be caused from too much milk in sows that are very heavy milkers. If scours appear in a litter of pigs, the first thing to do is to see that they are kept dry; then the feed of the sow should be changed, and if the scours continue a small dose of easter oil given to each pig should help to stop them. About a teaspoonful of oil makes a dose for a sucking pig.

Another disease that sometimes attacks sucking pigs is that called "Thumps." It is caused by young pigs becoming too fat through lack of exercise and too much milk from the sow. The young pigs simply become so fat internally that the heart and lung action is interfered with and the pig exerts a short, quick, jerking motion of the flanks in breathing. Once a pig becomes affected with thumps



The Piggery at Manitoba Agricultural College

little can be done for him, and he is almost sure to die. Prevention is the only cure, and thumps should be prevented by forcing young pigs that show a tendency to become fat to take lots of exercise.

Rheumatism is a disease which often affects pigs from fall litters in the winter time. It is caused chiefly by dampness in the hog house, but is often aggravated by lack of exercise and improper feeding. Little can be done to help a pig that has become badly crippled with rheumatism and here again the only cure is prevention by eliminating the causes of rheumatism in the management of pigs. If the pigs are kept reasonably dry, sufficiently exercised and fed laxative enough feeds to keep their digestive systems in order, little trouble will be experienced from rheumatism.

Pigs in winter time are sometimes affected with coughs of a more or less serious nature. These coughs are usually caused by dampness, cold and drafts in the pen, and the most important curative measure is to locate the cause of the cough and remove it.

Many skin diseases and parasites affect pigs. If detected before they have become too deeply seated, practically all the common skin diseases and parasite can be removed by washing and dipping the hogs several times with a two per cent, solution of creolin or one of

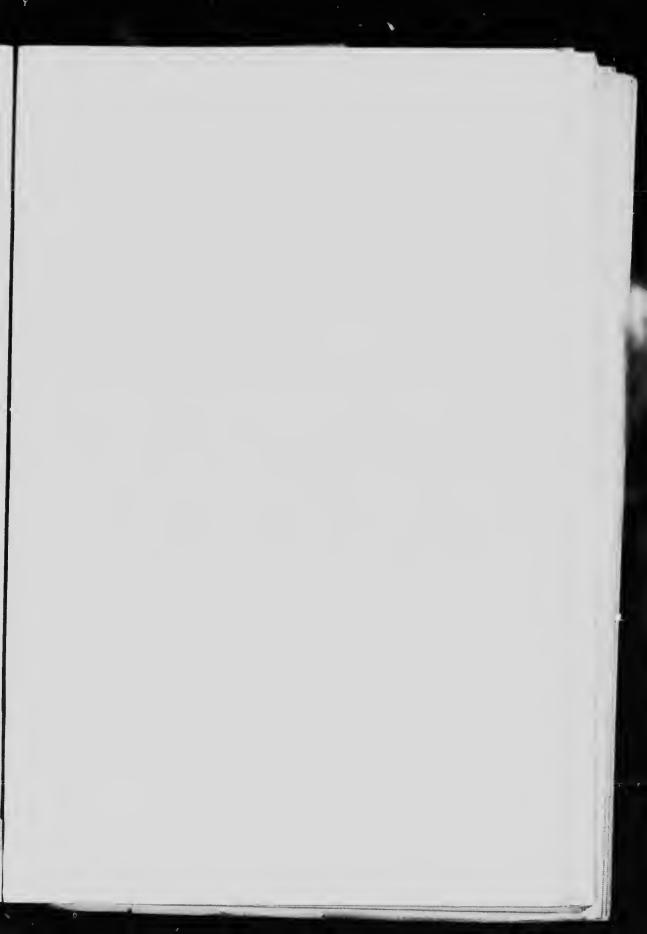
the coal-tar dips.

Worms often infest the stomach and intestines of pigs, particularly young pigs in winter, fed largely on grain. Symptoms of worms are a lack of thrift, tendency to coughing, languidness in the pigs and a tendency to be drawn up in the flank, accompanied by a lack of appealte. Hogs affected with worms may continue unthrifty for several weeks and then die. Many remedies might be recommended that will be quite effective in ridding the pigs of the worm. The one that is perhaps easiest to use and one that will be quite effective is



The Type of Pig Cots in Use at Manitoba Agricultural College, Wintering Brood Sows, and for Housing Sows and Litters in the Spring when Turned on Pasture

as follows: Withhold feed from the pigs at night, and the next merning feed in a thin slop of milk and shorts about one teaspoonful ci curpentine to each 80 pounds liv weight of pigs. Repeat this three mornings in succession and then give a dose of Epsom salts of about two ounces to a 100-pound pig, or four ounces to a 300-pound pig.



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