

BULLETIN
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*Agricultural and Mechanical College
of Texas*

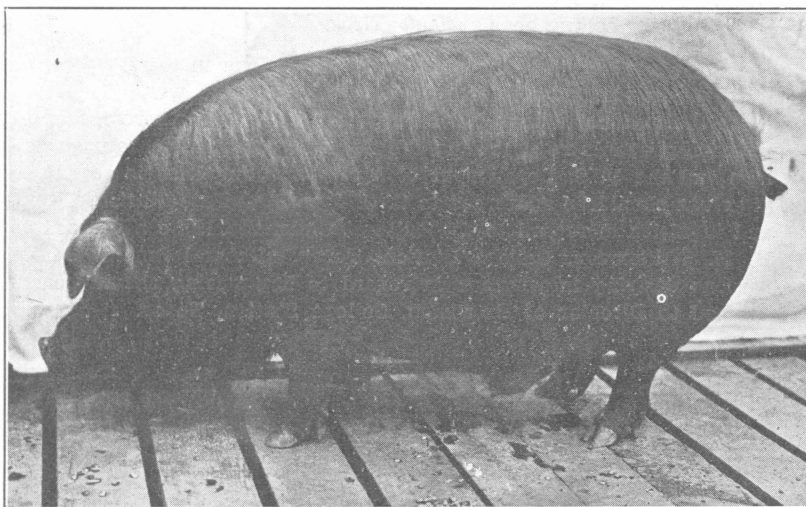
(in co-operation with the United States Department of Agriculture)

JULY, 1916

EXTENSION SERVICE

No. B-25

*How to Raise a
Prize-Winning Pig*



GRAND CHAMPION DUROC-JERSEY BARROW

National Feeders' and Breeders' Show, Fort Worth, Texas. Fed, bred and exhibited by the Agricultural and Mechanical College of Texas.

Address
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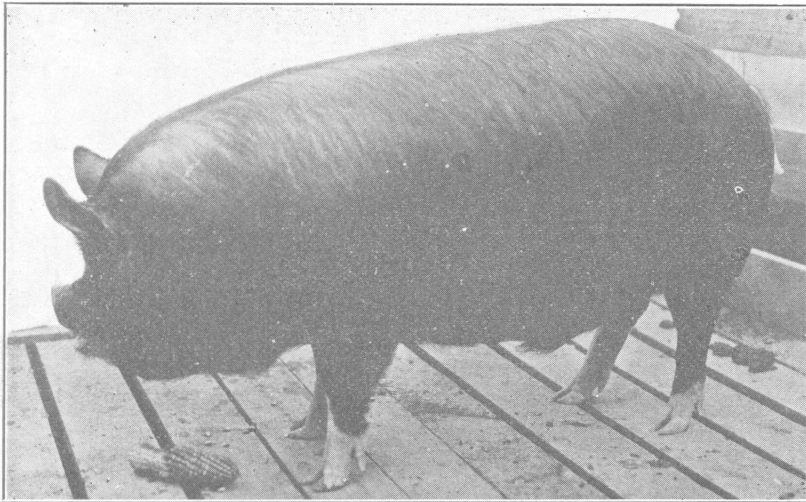
On account of the increasing number of county fairs in Texas, offering opportunities for pig club members to show their pigs, it is deemed well to furnish the accompanying instructions for raising prize pigs. The bulletin will serve also as useful advice to all persons engaged in raising hogs for market. The National Feeders' and Breeders' Show at Fort Worth offers premiums in the fat classes for pigs that are ready for market, and the animals can always be sold on the Fort Worth market after the exhibition. The Dallas Fair is now ready to make a classification of breeding classes for boys' clubs. Hence the opportunities are rapidly increasing for winning prizes and for selling hogs at good prices.

Pig Club boys desiring particular instructions in raising pigs, or boys wishing information in regard to entering club work should address their county demonstration agent. In counties where there are no county agents representing the Agricultural and Mechanical College and the U. S. Department of Agriculture, inquiries in regard to pig clubs should be addressed to C. C. French, College Station, Texas, and inquiries in regard to Agricultural Clubs should be addressed to H. H. Williamson, College Station, Texas. General inquiries from persons desiring information in regard to hog raising should be addressed to Director of Extension, College Station, Texas.

How to Raise a Prize Winning Pig

By L. B. Burk, Associate Professor of Animal Husbandry, Agricultural and Mechanical College of Texas.

Fitting animals that can go into the show ring and win the blue or the purple where the competition is as keen as it is in our leading American shows is not an easy task. The boy, girl, or even the experienced herdsman who can do this is justly called a master of the art. It requires knowledge, patience, an observing eye, common sense and hard work to be successful. One must know the habits of the animal that is being fed. He must know what feeds to use and just how to feed in order to produce the desired results. He must have judgment enough to cope with unexpected situations as they appear, and patience enough to wait for the natural results.



FIRST PRIZE BERKSHIRE BARROW.

At the National Feeders' and Breeders' Show, Fort Worth, Texas. Fed and Exhibited by the Agricultural and Mechanical College of Texas.

SELECTION

Although feeding and caring for the pig is by far the largest factor in the production of a winner, yet this part of the process would be useless if the right kind of animal is not selected to begin with. To be sure, many animals are selected that afterwards are discarded because they do not develop properly, but it is useless to spend time and money on an animal that in the beginning does not meet the requirements of a good prospect.

The pigs that are to be entered in the boys' pig club contest should be selected just before they are weaned. If the pigs are not to be entered in the boys' pig club contest, then several pigs may be carried through and the selection made about two months before the show. When the selection is to be made it is well for the boy to get his father, county agent, or some good breeder to assist him in making the selection.

As fairs come in the fall and spring, and as it is important to have animals show with as much size as possible, the sows should be bred to farrow as soon after the first of March and the first of September as practicable. To do this, the sows should be bred about 115 days before these dates. The pigs that are farrowed between March 1st and September 1st will show as seniors or in the under-one-year class, while those farrowed between September 1st and March 1st will show as juniors or in the under-six-months class.

In selecting a pig, be sure that the one picked out is typical of the profitable type. For the three leading lard-type breeds in the South, namely: Berkshire, Duroc-Jersey and Poland-China, the requirements as to type are practically the same. The large, straight-lined, thick, even-fleshed individual that will dress out a high per cent of prime quality meat is the kind that pleases the judge regardless of the breed he represents. The form of the pig should be wide, deep, medium-lengthed and symmetrical. The back line should show gradual even arch from the shoulders to the rump and the lower line should be straight. The width of the body should be uniform from front to rear, showing smooth full sides, a wide loin and deep, plump hams. He should stand on strong, clean, short legs that are set square and straight under each corner of the body. The pasterns should be short and strong and the toes should not spread apart. A medium-sized bone, a thick coat of straight, fine hair and a skin that is free from wrinkles add greatly to the general appearance of the finished hog and indicate a superior quality. A pig that is narrow in the hind quarters, shallow-bodied, narrow and long in the head and neck, low in the back and weak in the pasterns is a very poor prospect for a prize winner. Also, the extremely short-bodied, "dumpy" type never gets large enough, and the extremely big-boned, thick-hided, curly-haired type is usually too much out of proportion and too coarse in quality to be successful in the show ring.

FEEDING THE PIG.

The art of feeding requires a great deal of skill and a keen, observing eye. The good feeder learns what his individual likes and feeds him in such a way that he is always ready for his feed at meal time. The pig should be fed from the time it is born until it is finished. In fact, the sow should be fed a balanced ration and allowed plenty of exercise while she is carrying the litter, in order that the pigs be in a strong, thrifty condition when they are dropped.

From farrowing time until the pigs are weaned, the sow is under a severe strain. It is at this time that extreme care should be exercised in feeding. Too much feed is often given the sow the first few days and too little after the pigs are two or three weeks old, resulting in overfed or scouring pigs at the beginning, and stunted, undersized pigs at weaning time. For the first 24 to 36 hours the sow needs to remain quiet and be given nothing but water. If the sow is given a large quantity of rich slop at this time it is almost sure to result in the pigs scouring. On the second day, if the sow is not getting green feed, a bulky laxative ration, made principally of wheat bran, should be given. About one pound per day for every 100 pounds of live weight of the sow is sufficient. After the second day, gradually substitute wheat shorts, skim milk, or tankage for the wheat bran, and add rice bran, milo, kafir, or corn chops to the ration. Use about two to three weeks in getting the sow on full feed. After the sow has been placed on full feed, give her what she will clean up readily twice each day.



NOLAN WILSON (IN CENTER) OF ALLEN, COLLIN COUNTY, TEXAS. This 16-year-old boy has won more prizes at National Feeders' and Breeders' Show at Fort Worth than any other boy. His winnings in 1915 amounted to \$280. He is now a breeder and feeder of hogs.

DAILY RATIONS FOR SOWS IN DRY LOT, SUCKLING PIGS.

Ration No. 1.

Rice bran, 4 lbs.
Kafir, milo, feterita or corn chops,
4 lbs.
Skim milk, 24 lbs.

Ration No. 2.

Wheat shorts, 3 lbs.
Corn chops, 6 lbs.
Tankage, 1 lb.

If the sow is running on green pasture, the tankage or skim milk is not so necessary in the ration, because the green feed will supply a

large amount of the necessary protein. However, better results may be expected if at least a part of the tankage or skim milk is given.

Too much attention cannot be given to the milk production of the sow at this time, since the growth and thrift of the young pigs depend almost wholly upon the supply and quality of milk they get. It is well to remember that the milk fat on the pig has been easily and economically put on. A few days of carelessness and neglect will cause the pigs to lose this fat which will be difficult and expensive to put back. It is highly important that the growth of the pigs be not checked, since a stunted pig usually proves unprofitable.

After the pigs are two or three weeks old, a creep or small pen should be fixed where the pigs alone can come in and eat. A shallow trough of the proper size should be supplied. The pigs may be taught to eat by pouring into the trough at feeding time a small amount of warm cows milk. After the pigs have learned to eat, the warm whole milk may be gradually changed to cold skimmed milk, containing a small amount of wheat shorts. Pigs should never be fed more than they will clean up readily. They do not relish stale or soured feed fed to them in a dirty or foul smelling trough.

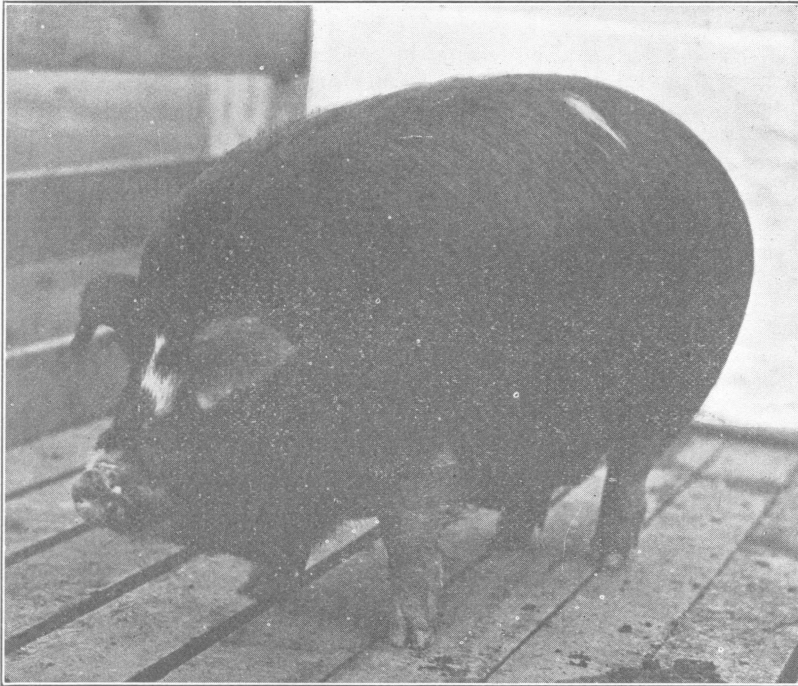
As the pigs grow older they should be given corn, milo, kafir or feterita chops along with their shorts and skim milk. Where skim milk is not available, tankage may be substituted very profitably. It is very important that a lot be provided large enough for the sow and litter to get plenty of exercise, as exercise is absolutely necessary for health and thrift. However, sows will often cause their pigs to take too much exercise if the lot is too large.

WEANING THE PIGS.

When pigs are eight to ten weeks of age they should be weaned unless they are being grown to be exhibited for prizes. In that case they can not get too much milk. In doing this, the ration of the sow should be cut down in order that the milk flow may not be lessened. At the same time the quantity of feed given the pigs should be increased so they will not get hungry for the lack of milk. If this is done four or five days before the pigs are taken away from the sow, the sow's udder will be left in much better condition and the pig's growth will not be checked by the sudden change in the quantity and kind of feed that it gets. Frequently the udder of a sow is ruined and the pigs' growth often checked for a month or six weeks on account of this sudden change. It is especially important to give the show pig growth-producing feed and plenty of it at this stage of his development, because the lack of size at show time is often due to improper care and feed at weaning time.

FEEDING THE PIG AFTER WEANING.

After the pig is weaned and has fully recovered from the change, it should be allowed to graze on a variety of succulent, tender forage crops in addition to having all of the grain it will consume. Such forage crops as alfalfa, cowpeas, soy beans, sweet clover, Sudan grass, peanuts, rape, and Bermuda grass have proved excellent crops for hogs during spring, summer, and early fall, while oats, barley, wheat, rye, rape and bur clover furnish satisfactory grazing in winter. If none of these crops are available, weeds, lettuce, cabbage, or any of



SECOND PRIZE POLAND-CHINA BARROW.

At the National Feeders' and Breeders' Show, Fort Worth, Texas. Fed, Bred and Exhibited by Agricultural and Mechanical College of Texas.

the root crops, such as turnips, stock beets, etc., that may be taken from the garden may be supplied with good results. A pig will seldom get too fat before the show, even if he is fed all of the grain he will consume, if the ration is properly balanced, if it gets plenty of exercise and is allowed all of the green feed it will consume. At this age the pig should be growing rapidly, consequently it should be given all it will consume of a good growing ration, one that is bulky, succulent,

and rich in protein. Green feed is very essential, because it aids in reducing the cost of gains, supplies some of the necessary food nutrients in the ration, and keeps the digestive system in a strong, active condition.

EXERCISE.

A pig should have plenty of exercise at all times. Of course, if it is allowed to graze in a roomy plot of an acre or more it will ordinarily take all the exercise that it needs, but if it is kept in a small pen, it should be turned out in the early morning each day, and if it does not take exercise it should be forced to do so.

FEEDS.

Although green feed is very essential and gives the best of results when given in connection with a grain ration, yet it must be remembered that the best forage crop is little more than a maintenance ration and little or no gains at all will be made on grass alone. It is necessary, therefore, for the best results to feed, in addition, a more concentrated feed, such as a mixture of grains or mill by-products.

In Texas there are a number of feeds that are very similar in composition and nearly equal in feeding value. Hence, the feed that can be raised at home, or is the cheapest to buy, is the one that usually should be fed. The similar carbonaceous, or fat-forming feeds, are: Milo, corn, kafir, feterita, rice polish, and rice bran, while the protein, or growth-producing feeds are: Tankage, cotton seed meal, peanut meal, soy bean meal, wheat shorts, and skim milk. Both kinds of feeds are necessary to the animal's body, and the proper combination of two or more of them will give you what is called a balanced ration.

The following balanced rations have been used very successfully:

No. 1.	No. 2.
Corn, 9 lbs.	Corn, 6 lbs.
Tankage, 1 lb.	Cottonseed meal, 1 lb.
No. 3.	No. 4.
Corn, 5 lbs.	Corn, 5 lbs.
Wheat shorts, 5 lbs.	Wheat shorts, 2½ lbs.
No. 5.	Tankage, ½ lb.
Corn, 2½ lbs.	No. 6.
Peanut meal, 1 lb.	Corn, 5 lbs.
	Wheat shorts, 2 lbs.
	Skim milk, 20 lbs.

Although corn is considered the best fattening feed, yet milo, kafir, feterita, rice bran or rice polish may be substituted with almost equal results. The rations given above are for hogs in a dry lot. With most of the green feeds, the protein in the ration may be somewhat less than is suggested for hogs in a dry lot. Although these rations have given good results, the practical feeder knows that a prescribed feed and method can not always be followed to the letter, because no

two pigs will feed exactly the same. Some put on fat more readily than others, while still others are delicate feeders and must be fed accordingly. The feeder must use his judgment, and if his pig does not like the feed that is put before him, he must seek to find something that the pig will eat, because a "light" feeder never develops into a prize winner.

Quite frequently the pig, as he nears the finishing period, will go off feed. At this time it is extremely important that it be in good condition and eating its regular amount each day. Sometimes a slight reduction in the amount of feed given for two or three feeds, or a little blackstrap molasses or sugar will aid in toning up its system, so that it will continue to make its normal gains each day.



VAN ZANDT COUNTY PIG CLUB BOYS
at National Feeders' and Breeders' Show, Fort Worth, Texas. E. Gentry,
District Demonstration Agent, on left; M. H. Vandiver, County
Demonstration Agent, on right.

REGULARITY.

It is highly important that the pig be fed regularly. Irregular feeding hours will cause the pig to be very hungry and restless at one feeding period, while at another it will not care for its feed. This practice will tend to upset his digestive system and it will cease to consume the amount of feed necessary for maximum development. On the other hand, if the pig is fed, exercised, watered, and allowed to rest at the same time each day, it will be contented and the most rapid development is assured.

Although it is often advisable to change the feed given, yet extreme care should be exercised in doing so, and it should be done very gradually. A sudden change of feed is almost sure to produce evil results.

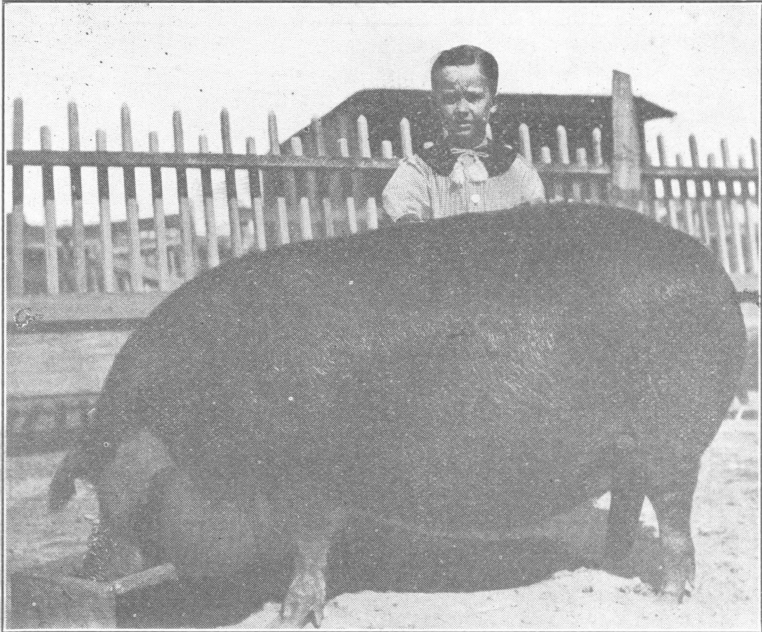
WORMS AND LICE.

If worms are allowed to exist on the inside of the pig and lice on the outside, there is little chance for thrift and health. Hence, it is very necessary to keep the pig free from these parasites, because they sap the very life-blood from the individual.

The following mixture aids in preventing worms, and should be kept before the pig at all times:

Charcoal, 1½ bu.
Wood ashes, 10 lbs.
Air slaked lime, 4 lbs.

Salt, 4 lbs.
Copperas, 2 lbs.



JACK VERNON STARR, AGE 7½ YEARS, OF MIDLAND, TEXAS, and his prize-winning Duroc-Jersey sow which won five first prizes at Midland Fair. Master Jack later sold nine pigs from this sow for \$12.50 each.

If this mixture does not entirely prevent the worms from getting into the digestive tract of the pig, the following formula may be given with success:

Santonin, 2½ grains.
Areca nut, 1 dram.

Calomel, ½ grain.
Sodium bicarbonate, ½ dram.

The above amount is for a 50-pound pig, to 100-pound pig, twice as much, and to a 200-pound pig three and one-half times as much. Withhold feed 24 hours before giving the above mixture. Repeat dose in eight or ten days.

Lice are the cause of enormous losses each year to the average hog raiser. They make the pig restless, and at the same time they suck blood from his body. Any of the coal tar dips that are sold at the drug stores will give good results in destroying lice. The directions are on the containers and should be followed, ordinarily. Crude petroleum (Beaumont oil) is also very successfully used by many of the leading breeders. Any method of applying the dip will be successful if the dip is put on every part of the animal's body. A vat is used with great success where a large number of hogs are to be dipped, but where only a few are to be dipped a sprinkling can or a saturated rag will prove satisfactory. The dipping should be done every 10 days until all of the lice are killed.

The feet should be kept trimmed, and the last trimming should be done two or three weeks before the show, so that all soreness caused by the trimming will have time to disappear before the show.

SHIPPING.

If only one pig is to be sent to the show it may be shipped by express in a large, roomy crate. Do not crate the hog until it is ready to go. If the weather is hot, wet grain sacks may be tacked on the top and on the sides of the crate near the top to provide shade and keep the pig cool until it is placed on the car.

If a number of hogs are to be shipped, a large, well bedded, well ventilated car should be provided. The car should be bedded with sand, and wet thoroughly. The hogs should not be crowded, and enough water should be taken along in the car to last until the hogs arrive at the show. On arrival the hogs should be unloaded as soon and as carefully as possible, located in well bedded stalls and given water. Feed very lightly for the first day to prevent the hogs from going off feed. Keep them as quiet and as comfortable as possible until the morning of the show. Then wash them thoroughly and brush the hair out straight. After the hair has dried, go over the body again with an oiled rag.

On the day the hog is to be shown it should be ready when the class is called and driven out promptly. Show your hog to the very best advantage, and never give up until the ribbons are tied. Then, if you do not win the blue or the red, or even the yellow, profit by the following quotation:

"If you get an awful fall,
Keep on smiling.
Crying! That won't do at all.
Keep a comin'.
Don't emit a doleful whine
Kase the fish ain't on your line.
Bait your hook and keep on tryin'.
Keep a comin'."