GRADUATING THESIS.

BACON HOGS.

by

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Bacon Hogs.

If there is one class of farm animals that is misunderstood, undervalued, and uninvestigated by the majority of farmers in the United States, both in the corn belt and out of it, it is the bacon hog. Investigation shows that the unfavorable light in which the bacon hog is viewed is due largely to an attempt on the part of the farmer to consider the bacon hog from a strictly lard producing standpoint.

The bacon hog is designed for the production of bacon and it is most important that they should not lay on fat as do the lard producing hogs. The bacon hog is a pure bred animal in fact the principle breed of bacon hogs, is one of the oldest breeds of hogs known. They are bred for the economical production of bacon of the highest class, and as high grade bacon has a large proportion of lean meat to fat consequently a bacon hog must produce much more lean meat than fat. This point has been kept well in mind in the developing of the breeds of this class, and as a result a hog has been obtained that differs in many respects from the so called mortgage lifter of the corn belt and certainly will not fill all the qualifications of the fat hog classes. And best results from them cannot be obtained under conditions in which the fat hog gives the best returns. That the men who have been handling the bacon hog knew what they were about, is shown by the following standard of excellence as adopted by the National Pig Breeders Association of Great Britain, the Tamworth being the leading breed of bacon hog:

Tamworth.

Color......Golden red hair on a flesh colored skin, free from black.

Head.....Fairly long, shout moderately long and quite straight, face slightly dished, wide between the ears.

Ears......Rather large, with fine fringe, carried rigid and inclined slightly forward.

Neck..... Fairly long and muscular, especially in boar.

Chest......Wide and deep.

Shoulders....Fine, slanting and well set.

Legs.....Strong and shapely with plenty of bone and set well outside the body.

Pasterns....Strong and sloping.

Feet......Strong and of fair size.

Back...........Long and straight.

Loins.....Strong and broad.

Tail.....Set high and well fastened.

Sides.....Long and deep.

Ribs..... Well sprung extending well up the flank.

Belly..... Deep with straight underline.

Flank......Full and well let down.

Quarters....Long, wide and straight from hip to tail.

Hams......Broad and full and well let down to hocks.

Coat......Abundant, long, straight and fine.

Action.....Firm and free.

Objections...Black hair, very light or ginger hair, curley coat, coarse mane, black spots on skin, slouch or drooping ears, short or turned up shout, heavy shoulders, wrinkled skin, in-bent knees, hollowness back of shoulders.

The foregoing table shows that it has been the object of the breeders of these hogs to obtain a hog that was long and deep with

a good constitution and of fine quality. There is an object in every one of the foregoing requisites of the Tamworth hog, and in following these qualifications they have produced a hog that owing to its good constition, length and depth of body and fine quality, gives to the consumer an excellent quality of bacon.

After the hog has been obtained, the next thing is to feed him in such a manner that he will produce the best and greatest amount of bacon at the least cost. This is one of the Tamworth hogs'strong point as he is expecially fitted for the consuming of forage and other cheap feeds and turning them into meat. Such feeds as alfalfa, rape, barley, field peas, soy beans and roots, that can be produced at a small expense are the ones that give the best results with the bacon hog, although it is true that the bacon hog will give fair results from a strictly corn diet. In almost every case where feeding experiments have been tried with bacon, fat hogs and crosses between the two breeds, the bacon or the cross bred hogs have the most profitable returns for the feed consumed. An experiment conducted at the Idaho Experiment Station to determine the economy of feeding cross-bred Tamworth-Poland-China pigs. These pigs were all of one litter, three barrows and three sows. The pigs were fed from August 28th to September 25th on shorts soaked from one week to the next. On September 25th the ration was changed to chopped wheat fed in the same way. This ration was fed until November 25th when it was changed to a mixture of one-third chopped wheat and two-thirds pea meal which ration was continued to the end of the experiment, of the experiment, December 17th. The pigs made the largest gain during the period when the mixture of pea meal and chopped wheat was fed. The mixture was not fed through a long enough period however to warrant conclusions regarding its value. The following results were

obtained: On August 28th the six pigs weighed 458 pounds, on December 17th they weighed 1,254 pounds, making a total gain of 796 pounds in 112 days. During this period the hogs consumed 3,134 pounds of grain. These hogs consumed 393.7 pounds of grain for every 100 pounds of gain and made an average daily gain of 1.185 pounds. The results as shown above compare very favorably with the feeding experiments conducted with other breeds. The ratio of gain to feed consumed is greater than in the majority of experiments, and in comparing with results from other states where corn is used for a portion of the ration the ratio is still greater.

The following note is taken from a report on the Hog Industry by George M. Rommel, published by the Bureau of Animal Industry, Department of Agriculture, Washington, D. C.: The cross-bred Tamworth-Poland-China pig, for a bacon hog in our opinion is certainly a very desirable one. The pigs are thrifty from the time they are farrowed until matured.

E. N. Ball of Hamburg, Michigan writes in the official organ of the American Tamworth Swine Record Association that in 1900 he selected three pure-bred Tamworth pigs about six weeks old, one male and two females. The pigs weighed 93, 91, and 61 pounds. At the end of three months and six days the pigs were disposed of and weighed 203, 207, and 175 pounds, making a total gain of 340 pounds during the ninety-seven days. During this period they were fed 581 pounds of corn, 643 pounds of fine middlings, slop from the house was given and no milk at any time. The hogs gave a return of 100 pounds gain for each 360 pounds of feed. The corn cost 38¢ per bushel and the middlings \$16 per ton, the total cost of the feed being \$9.10, or \$.0268 per pound. Considering the time of year, this experiment was started in February, and also that the pigs were in good condition

at the beginning of the experiment the results are very favorable to the Tamworth ability to make gains economically.

An objection that is often given to bacon hogs is that there are no market quotations given for them and that the packers pay no more for them then they do for other breeds. The probable reason for this is that bacon hogs have not until the last few years been received in sufficient quantities on the hog market to make it profitable to consider them in a special class, but during the last few years the packers have awakened to the fact that the special breeds of bacon hogs when fed upon good bacon producing feeds, furnish a quality of bacon that commands a much better place and price in the markets. In reply to a letter asking for their opinion regarding bacon hogs the S.&S. Packing Company of Chicago said: "We have a firm belief in the good qualities of the bacon hog, that they have a great future before them and there is no time in the year when they are not in great demand."

A letter to Swift & Company of Chicago brought a reply very favorable to bacon hog interests, and accompanying it a copy of the paper written by J.J.Ferguson entitled "The Place for Large Yorkshires in American Swine Husbandry". The Yorkshire being one of the breeds that are classed in the bacon classes. In this paper Mr. Ferguson says: "In this country we have something like twenty recognized breeds or well developed types of swine, each supposed to possess certain peculiar or special characteristics fitting them in a superior degree for certain uses or rendering them especially adapted to thrive under special conditions. Multiplicity of breeds and types is due primarily to the whim and fancy of the breeder but it is also largely dependent upon the wide variation of condition of soil and climate over the country. In our wide extent of territory with diversified

conditions of soil and climate resulting in a wide range of crop production, we naturally find a wide difference in the character and quality of the hogs produced in different sections. This is true to the extent that we may readily divide the hog producing territory into well defined areas, each presenting what is practically a distinct and characteristic type of swine. For example the lard hog of the corn belt is the result of an abundant supply of feed, rich in fat producing material. Continued experience has demonstrated that the lard type hog, while undoubtedly the most profitabe type for the corn belt, may not in all cases give the farmer of the eastern or northwestern states the largest net returns. In the northwestern states where the supply of feed is of such character that they tend rather to production of lean meat than of fat in excess it is more difficult to develope the lard type of hog to the highest point of excellence. At the same time these feeds are such that they will produce a profitable type of hog admirably for certain markets where the heavy hog is no longer wanted.

In states outside the corn belt proper and especially in those of the northwest where corn is produced to a limited extent, wheat, peas and barley and all nitrogenous or muscle forming food may be grown abundantly, hence the farmers in these states may properly decide to meet the conditions already at hand and produce the type of hog which has been found to give the best results under like conditions under older sections of the country.

The high degree of excellence in bacon production from Denmark,

Great Britain and Canada where the supply of feed is quite similar

to those of the northwest demonstrated the desirability of handling

the type of swine which is given profitable results in those countries.

In those same countries it would be a mistake for the farmers to

introduce and persist in breeding a lard type hog since it would not only be impossible to maintain a high standard of the type under those conditions, but seeing that a high class of bacon hogs fitted for the finest export trade may be produced it would be a mistake financially." He also states what all hog breeders have known is that the markets of the consumer are demanding a lighter hog and one that produces a tender, juicy ham and bacon. Without doubt the tendency will continue in this direction, consequently we turn to the bacon hog to fill the requirements. In discussing the ideal bacon hog, he gave the description that fitts very well with the requirements in the more important respects with those called for in the Tamworth hog.

In conclusion he says in regard to large Yorkshires, as to their place in the United States, "I do not recommend their general introduction all over the country to the exclusion of the present type which in many cases are producing maximum results with great profit. In any section of the northwest where the production of bacon hogs are already established and profitable industry, the Yorkshire is strongly in demand, and this demand will continue as the requirements for bacon hogs increase."

These statements from packing firms who are in a position to know the exact instand outs of the trade and the requirements of the packers! trade show that the bacon hogs are already in great demand and that the demand is constantly increasing. The number of bacon hogs in the United States is proportionally small. With the large extent of country in the United States that is so amply fitted for the production of crops necessary for the production of fine bacon, why should we allow England and Canada to so far surpass us in the production of fine bacon when it is so profitable an industry.

Among the many advantages which a bacon hog has over the lard type, is its ability to produce bacon from coarse cheap feeds and its quick return of money. Bacon hogs are ready for market at an early age, they sell upon the market at a greater price than will any other type of hog, enabling the breeder or feeder to turn his money in less time than with the other types of hog. He is also enabled to put his hogs upon a forced market because of a scarcity of feed or other difficulties at less loss than can the feeder of the lard type.

That the bacon hog industry is a profitable one, is disputed by none, with his ability to produce bacon from cheap feed, his constantly increasing demand upon the market and with the encouragement given by the packers will in a few years cause the breeding of bacon hogs to be one of the most widely distributed and profitable of industries in the United States outside of as well as in the corn belt.