

CARCASS DATA, TRENDS AND THEIR USE IN OUR HERD

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The breeder has two primary opportunities to change the genetic composition and improve his stock. His first is in the selection of breeding stock and the second is the manner in which he mates the selected stock. The latter involves mating systems and is a subject of swine breeding within itself.

In designing a selection program, we must keep in mind our primary interest is in the breeding values. Breeding values is the ability to transmit to its offspring the ability to perform well in the desired traits. Neither the individual's performance nor the performance of its relatives is a perfect indicator of breeding value. However, either one means more to me than someone's visual appraisal unless it is my own and I know what bloodlines are present.

The genetic improvement to be expected from selection depends on:

1. The amount of variation in the trait within the herd or breed
2. Heritability of the trait.
3. The amount of selection pressure for the trait.

The start of certification was 1954 - 25 years ago. The data in Table I is a representative sample of our herdsires over a 15 year period in which we certified 37 boars and had two that failed. The data is the average of the first 5 CL's of each boar, which would be 10 head of barrows and gilts. Some of these sires had as many as 40 CL's, others only 5. Certification really caught fire in about 1963 with the Sire Performance Testing. This data may not mean much to some of you but it sure does to me as it took me two nights looking through old Herdsmans to put this together and a lot of wishing I had some of these herdsires, back again.

As you look at Table I, I think we can see some definite trends. First of all we had to get a large amount of data on different bloodlines to know what would improve different traits. A quick change in muscling was easy to do in my opinion because of the visual indicators of large loin-eyes - mainly ham shape and size. In 1963 we had Tabulator who was 3 to 5 years ahead of his time, especially in growth rate, bone and muscle. In 1964 we had Tollway, a boar that was as modern as 1979 in length and leanness. We used these 2 boars for a majority of our sow replacements as we sorted through boars the next 5 years until Buc, Ditto and Husky then filled the gap until Blue Chip in 1972. By then we were testing boars and our customers seemed to like boar data over certification on littermates and it was also easier and cheaper for us to do. So the early 70's were the end of the certification era. Hamps had 189 CL's in 1954, 1273 in 1967 and only 46 in 1974. Our top year was 1967 with 5 new CMS, 59 CL's and data on over 200 head. In 1979 we got data on about 30 head of barrows in different production or live barrow shows. The glamour of barrows shows is even over now, as we have looked to more complete evaluation in the form of production barrow shows, etc. What data we do get now is done very poorly and with a large variation from different planes. Some of you can cuss the sonoray etc. on its inaccuracy but I will put our man Paul McGovern against anybody and put more faith in his data than some carcass data done by some County Extension Agent and his cattle grid.

Therefore, I see a lot of accurate data we have compiled on our herdsires as sonoray data since 1971. This data is a sample of the 56 herdsires we have data on the last 8 years.

It should be remembered that this is boar data, and boars should be leaner and meatier than barrows or gilts. Look at the last 4 boars on Table I and these same boars on Table II. You will find their ranking almost identical on all three traits.

A lot of bloodlines that had good carcass and sonoray data, in our herd, were used very sparingly for various other reasons, mainly undesirable production traits. The main bloodlines we have built around the last 8 years are 71 Buc, 72 Husky, 74 Blue Chip, 75 Magoo, 76 Caboose, 77 Massive, 78 Stump, and in 1979, Taxi, Agile, and Gembo still all have a shot at making a brood sow sire. So as you can see we have had many changes in our herd the past 20 years or so. Some have been positive for the end product and negative from production stand point while others have been just the opposite. I guess, to me the disappointing thing about all this data is that we have not really improved our growth rate very much. Considering the advancements in housing, feeding, etc., we should have done better genetically.

I am convinced we will not make a big switch back to extremely meaty pigs unless someone pays us to. Great strides were made in improving hog carcasses during the sixties mainly on pride and barrow shows, not economics. The next big change the commercial producers make will have to add dollars on his checks. The packer has his problems too, he can't pay \$2.00 cwt more for good hogs over average and then sell their product all at the same price. Yield will not make up the difference - we really need a new marketing program for pork products.

Commercial producers are paying more attention to production traits, litter size, growth rate, feed efficiency etc., than they are carcass traits. However, these traits are not very highly desirable and progress is very slow. Improvement can not be made just using visual indicators. They will have to keep records, weights, etc., then progress will be slow.

I see a trend in our buyers going back to thicker, deeper, growthier boars that naturally have more muscling than those long, tall, narrow snakes they may have tried the last time.

Commercial producers don't care how big their sows get or when their hogs mature just so they get to market at 5 months at 220 lbs.

What I am trying to say: We breeders have all the genetics out here to put together any kind of hog the market demands. Just pay us a little more for the pig with no ears, no tail and 7 inch loin and we will produce him.

Table I

Certified Meat Sires

<u>Year</u>	<u>Sire</u>	<u>Age at 220</u>	<u>Length</u>	<u>Backfat</u>	<u>Loineye</u>
1957	ME	183	29.4	1.35	4.14
1959	Pro	176	29.9	1.31	4.25
1961	Ind	178	29.8	1.35	4.78
1963	Tab	158	30.1	1.26	5.25
1964	TLW	165	31.1	1.12	4.98
1965	Eco	170	30.4	1.22	5.26
1965	Crs	151	30.8	1.17	4.78
1966	GD	174	29.7	1.22	5.39
1967	Ali	171	30.6	1.19	5.74
1967	Reb	174	30.8	1.05	4.77
1968	Buc	164	30.8	1.12	5.21
1968	Con	171	31.1	0.98	5.62
1969	Pru	155	30.2	1.26	5.81
1969	Oly	163	30.3	1.10	4.96
1969	Dit	160	30.6	1.20	5.50
1970	Hus	157	30.4	1.06	5.46
1971	BM	163	30.8	0.99	6.45
1972	Yuk	159	30.7	0.99	5.64
1972	BC	160	30.6	1.07	5.71
1972	GH	155	30.8	1.14	6.08

Table II

Boar Sonoray

<u>Year</u>	<u>Sire</u>	<u>Age at 220</u>	<u>Backfat</u>	<u>Loineye</u>
1971	Buc	166	.88	6.27
1972	Hus	157	.85	6.12
1973	Yuk	160	.85	6.15
1973	BM	164	.87	6.43
1973	GH	161	.86	6.32
1974	BC	165	.85	6.11
1974	Max	168	.83	6.06
1974	Ad	155	.84	5.81
1975	Mag	163	.84	5.81
1976	SB	156	.81	5.82
1976	Cab	157	.81	5.81
1977	Cas	155	.81	5.81
1977	Mas	157	.83	5.79
1978	Jr	168	.82	5.65
1978	St	159	.76	5.27
1978	PM	167	.75	5.26
1978	HO	172	.78	5.37
1978	STP	165	.81	5.68
1979	TX	164	.75	5.60
1979	AG	163	.79	5.51
1979	GM	166	.78	5.46

All data on both tables adjusted to 200 lbs.