

Table 5. Presently Used Parameter Estimates and Economic Values

Trait	h ²		Economic Value		
			per unit	per s	relative
	.15	2.50	3.90	9.75	18.75
	.20	15.00	.50	7.50	14.42
D230	.25	12.00	-.10	1.20	2.31
ADG	.30	.20	4.00	0.80	1.54
F/G	.35	.25	-9.00	2.25	4.33
BF	.50	.15	-3.50	0.52	1.00

Table 6. Parameter Estimates and Economic Values with Pork Value Guide

Trait	h ²	s	Economic Value		
			per unit	per s	relative
	.15	2.5	3.90	9.75	5.16
LW21	.20	15.0	.50	7.50	3.97
D230	.25	12.0	-.10	1.20	.63
	.30	.2	4.00	0.80	.42
	.35	.25	-9.00	2.25	1.19
BF	.50	.15	-12.60	1.89	1.00

THE PUREBRED PRODUCER'S CHALLENGE

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Obviously, the challenge of being a purebred breeder is making an acceptable living and enjoying a career raising and selling seedstock. Although I have met breeders who could "sell refrigerators to eskimos" it is a wiser proposition to supply a product that consumers want. Both commercial livestock people and purebred breeders want one thing from their purchases, GENETIC VALUE. If you are going to sell it, you'd better produce PREDICTABLE GENETIC VALUE, and plenty of it!

I'm a teacher, but I've come here to learn. I do not specifically produce purebred hogs, but my goal is to influence students to prepare themselves to build a life in livestock agriculture. I'm one of a group of fortunate people who have the privilege of encouraging

some of the brightest young minds at the University of Missouri to study the opportunities and develop their own opinions of how to commit their lifetime efforts toward producing and selling superior seedstock.

A significant number of these young people are convinced they want to become purebred swine producers. Among their many required talents will be the pursuit of genetic improvement. If they are diligent, enthusiastic and apply proper concepts toward selecting and improving their herds, remarkable opportunities await them. There are few occupations where you can establish nearly limitless demand for your product, make decisions that could influence the complete industry and leave a valuable gift to mankind.

I have reviewed the purpose and goals of this organization as they were recorded in 1975. In addition to these goals, it seems that this group must be the eyes and ears of the pork production industry. We must sense the motion of change and provide logical and practical responses.

We must develop and test ideas that not only allow more efficient production of high quality pork, but also provide more profit and satisfaction to everyone involved.

Hopefully, purebred swine producers are watching the near revolution in the beef cattle seedstock industry. Personal conversations, meetings, sales and even shows hum with words like estimated breeding values, predicted difference and progeny testing.

An important question our industry must answer is how badly do we need to make changes, and what are we willing to invest or sacrifice?

From a college teacher's point of view, our young people are becoming more and more convinced that eye appeal and actual performance data must often take a back seat to ratios and estimated breeding values (EBVs). I believe the beef cattle business has been a major factor for this response. You recall that some of your valuable learning experiences took place outside the classroom, so let me set the following scenario: Two young men are discussing herd sires, one interested in cattle, the other hogs.

Cowboy: "What boar are you using?"

Curly Tail: "We're using a young boar sired by a state fair class winner. Hope his pigs are good! What are you using?"

Cowboy: "We're A.I.ing to a Line One bred bull that's minus one pound birth weight, plus 20 at weaning and plus 44 at yearling. He has 33 daughters at 105.2."

Recently, a large survey polled commercial cow men. One important question asked what they looked for in seedstock producers. They wanted Breeder Credibility, and they wanted what they paid for. What was the most important trait they searched for? Livestock with a minimum of problems (maybe that's what good performance really is).

We concentrate to convince our students that performance is more than just growth traits! Performance can be as simple as horned or polled, or black or red. It could be as complicated as how well a boar's progeny stand up on hard surface confinement, and it could be winning a blue ribbon at the state fair.

Most importantly, performance is recording important data and presenting it in the most valuable comparative manner so that decisions can be made which improve the chances of reaching goals of genetic selection.

There is no doubt that serious seedstock producers believe that constant, predictable breed improvement can result only from the collection of and intelligent use of accurate performance records. The future holds a place for fewer and fewer seedstock producers. Those willing to commit the effort to produce and sell predictable genetic value will survive and prosper. The same can be said for breeds and breed associations.

We need to agree on a system of collecting performance records, calculating relative genetic merit and presenting it in a manner that both purebred and commercial breeders can depend on it for results superior to what they are now recognizing. Most importantly, it must have enough merit to maintain or increase the value of our product.

Let's turn our attention to the opportunities that breed associations have concerning recording and reporting performance information. The four years that I spent at the American Angus Association were among the most rewarding of my life. I was fortunate to witness the huge amount of effort, expense and success generated by developing ancestral registration certificates issued with performance data and breeding values.

Breed associations generate income primarily by "selling" memberships, registration certificates and transfers. Decreasing membership activity coupled with staff, equipment, and travel cost inflation, means that in order to maintain activities and service their leadership must look to increasing the value of their product, registration certificates.

The opportunity for associations to attract the interest of a "new" group to the information on their registration certificates is real. Commercial cattlemen are finding that there is important information on PERFORMANCE REGISTRATION CERTIFICATES (PRC's). Moreover, purebred breeders selling commercial bulls are beginning to transfer registration certificates to commercial cattlemen. This has also created great opportunities to promote the added value of seedstock that have predictable performance.

Documentation of performance records on the certificate have increased the value of seedstock to both the purebred and commercial cattleman, and this could be only the tip of the iceberg. The far reaching effects are the snowballing interest in the collection and comparison of within and between herd data. Breeders who have

committed themselves to goals of measurable genetic improvement are reminded of their challenge and progress each time a certificate is issued or transferred. Purchasers of seedstock have documented proof of the selection pressure effort that went into the production of each genetic package.

There is no doubt that the survival of some breeders and their breeds could depend on the decisions their leaders must make in the very near future. Many of those leaders are present here. Leadership is influencing the thoughts and feelings of others. Leaders must understand the followers, the followers do not have to understand the leaders. Our leaders need to decide how badly this industry needs changes and the effort we must invest for those changes to occur.

UTILIZING PERFORMANCE PEDIGREES

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Production Traits

rate, efficiency and composition of gain

Production traits can be measured directly on pigs selected for breeding. The advantage of performance data on ancestors in the pedigree must therefore be viewed as additional information above and beyond the performance data of the individual. There are two guidelines that are helpful in a general consideration of pedigree data. They are:

1. The value of pedigree information is reduced by one half for each additional generation separating the individual from the pedigree record.
2. Pedigree information adds little accuracy to the estimation of the breeding value of the individual once reliable information exists on the performance of the individual.

A failure to recognize these two guidelines results in a gross overestimation of the value of data in pedigrees. This overestimation is so common and so serious that any group considering wide use of pedigree data should carefully evaluate their program to ensure that it is not misleading.

Reproductive Traits

Reproductive traits on the individuals cannot be effectively measured until after initial selection and mating. There is, therefore, some merit in making initial selections based on pedigree data. Even here, however, there is a tendency to overrate the value of the data present, particularly when looking at so called sow lines.