

Panel Discussion: Who Owns the Data and Where Is It?

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Historically, the beef industry has had significant debates concerning performance data after scientific investigation revealed the benefits of selection based on objective measurements. These debates took place at various venues; however, none more significant than those at the annual Beef Improvement Conferences. Breed associations, at first, debated the usefulness of collecting objective data since it was so different from the subjective evaluation used in the show ring and practiced by purebred cattle breeders. It was impossible for the subjective evaluation of cattle to stand up to the research results showing genetic change via selection based on objective performance records.

Once performance testing became conventional wisdom there were still issues of whether associations could use a breeder's data for the benefit of all association members and/or the cattle industry. The development of EPDs moved the industry into a new era of cattle breeding. The breed associations moved from protectors of the herd book of pedigrees to the major archives of objective cattle data for creating genetic values on which to base selection decisions.

Early on, some objected to the use of the data they personally collected being used for the common good of the breed. Association by-laws were amended to allow the use of recorded performance data to benefit all members and the cattle industry in general. The competitiveness of the industry prevailed, and every breed resolved to create the best genetic values possible for their breeders. This philosophy is embraced by today's registered cattle industry.

While the breed associations became the archives for performance data, early on they were not prepared to handle the complicated computations leading to EPDs. Several universities stepped up to help with the move to selection based on EPDs. This required a research effort which meant that the archived data of the associations was placed in the hands of another entity. This again sparked a good bit of discussion and debate at association board meeting. Universities were called on to explain the technology. Once the technology was in place university personnel were called on to explain changes in the evaluation from one year to

the next. Changes occurred since the data was accumulating at a fast pace and the analysis technics improved even faster. Of course, universities were never the owners of the data and it was fortunate that the industry had access to these arm's length entities which could objectively develop genetic evaluation.

Today, huge amounts of data are being collected throughout the industry. These data reside in a variety of databases held by private entities. These data can improve the competitiveness of entities in a segmented beef industry. Private concerns are now available to analyze data with sophisticated technology. These analyses are focused on more than just genetic improvement. The cattle industry has moved from a way of life to a business. A successful business cannot be sustained without data on which to make decisions.

In addition, the mapping of the bovine genome has resulted in the next generation of genetic evaluation procedures. Genomic testing results in large amounts of data which must be archived and brought into the evaluation process. Combining genomic data and performance data to compute genetic values is a milestone for the cattle industry. There may be questions of who owns the data; however, it is unquestionable as to the impact of these new technologies. Each improvement brings change, which requires explanation. Universities, breed associations and genomic testing companies all have major responsibilities to make sure the best analyses are available to the industry.

As genomic testing improves, it is possible that some entities will not share those values for the common good of the industry. Again, this is a competitive industry, and everyone is entitled to pursue ways to be competitive. Ownership of data may change in the future with private entities holding large amounts of data supporting their business decisions. It may become more difficult to access data necessary to promote the common good of the beef industry. Therefore, it is imperative that public sector research entities be adequately funded so research can be conducted that will make the general segmented industry competitive.