GUIDELINES FOR WITHIN HERD PERFORMANCE PROGRAMS

The primary responsibility for maintaining or improving traits associated with efficient beef production lies in the hands of seedstock producers. Only 3% of the U.S. national cow herd is owned by registered cattle breeders. Genetic change in the commercial beef cattle population is controlled by the genetic merit of bulls produced by these breeders. It is their responsibility to know the specific needs of their customers and to produce registered cattle that can help to fulfill those needs.

**Herd sires**

Sire selection is a sequential process. New herd sire candidates should initially be selected on the basis of EPDs for economically important traits, as provided by the appropriate breed association. These herd sire candidates may include both young sires produced in the herd as well as proven sires evaluated in other herds and available through A.I. Use of EPDs will facilitate comparison of such bulls from different sources. Other factors that should influence the selection of herd bulls include economically important, objectively measured traits for which EPDs are not available and subjective traits that affect the breeding program. Also, it is recommended that herd sires be structurally correct and undergo a breeding soundness evaluation prior to the start of each breeding season.

Accuracy of selection should be considered when choosing herd sires. Because EPDs are not exact predictors of true breeding values, they are subject to change after each evaluation, depending upon newly accumulated data. High accuracy sires are likely to produce progeny whose average merit closely corresponds to their EPDs. By comparison, young and low accuracy sires may produce progeny whose average merit either falls short of or exceeds prediction. Consequently, they should be used with some caution. The risk from using young sires can be decreased by selecting several whose average EPDs are equivalent to the desired standard. Progeny produced by this group should be quite similar to expectation.

**Heifer selection**

Seedstock breeders typically select replacement heifers from within their own herds as opposed to purchasing heifers from other breeders. This has the advantage of utilizing the same genetic resources that produce their marketable bulls.

Selection of replacements is a multi-stage process and is similar to any other selection scheme for females. However, it is important to note that the quality of sires used to produce the heifers will greatly impact the genetic potential of future calf crops.

Heifers should be culled for structural problems that may interfere with their ability to raise a calf, breed back, and have a long productive life. They should also be selected for superior genetic merit as predicted by their EPDs. Because yearling heifers have low EPD accuracies, the accuracy of selection for an individual heifer is low. However, selection of a substantial group of heifers has a high accuracy of selection for the average of that group’s EPDs.

**Merchandising for seedstock producers**

Effective merchandising depends on the integrity of the breed and breeder, coupled with a clear description of the products that are to be sold. Seedstock producers with comprehensive and accurate production records that are presented in a concise and informative manner have a valuable resource for use in the sale of animals. Credibility of the records is enhanced if the herd has a sound, progressive management program. It is becoming increasingly important to provide EPDs on several traits for effective merchandising. Seedstock customers rely on this information to assist them in making appropriate decisions.

Because the seedstock producer is selling a genetic “package,” he/she must provide estimates of genetic merit for traits of interest to the customer. Whenever available, EPDs and their respective accuracies should be provided on each bull offered for sale. If EPDs are not available, ratios of adjusted performance measures may suffice. If EPDs are available for other economically relevant traits, they should be provided as well.

Promoting bulls with actual and/or adjusted individual performance information can be misleading, especially if contemporary group information is withheld or unknown. Performance pedigrees from breed associations can be helpful tools in promoting specific animals. They allow for the complete disclosure of information, including ancestry, as sanctioned by an official organization.
Seedstock breeders should assist their customers with purchasing decisions. Some customers may need only the information on each animal before they are ready to make a purchase. However, some customers may appreciate a more service-oriented seedstock supplier. As the number of available EPDs increases, buying decisions become more complex. In order to assist the buyer with complex decisions, the seedstock provider should:

1. Consider the production goals of the customer.
2. Match seedstock to the buyer's current cow herd.
3. Recommend specific animals for purchase.
4. Justify the recommendations in terms of genetic improvement.

This type of service requires good communication between buyer and seller. The buyer may not be able to clearly describe his/her environment or cow herd. Therefore, the seller must ask specific questions and, if possible, visit the potential customer. This type of relationship may increase the number of repeat customers for the seller.