



Your stake in the Certified Angus Feeder Program

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There is increasing evidence that cattle breeders, both seed stock and commercial, need to be concerned about the carcass merit of the cattle they produce. Branded beef marketing programs, such as the American Angus Association's Certified Angus Beef, identify and use only cattle that meet certain live and carcass specifications. In addition, major packers are developing programs to buy cattle and sell meat products based on carcass specifications.

Therefore, there's little doubt breeders of Angus cattle must be in a position to produce seed stock with a predictable carcass weight, ribeye area, fat thickness, and marbling score. It now appears these traits will become more economically important to beef improvement.

The American Angus Association's Certified Angus Feeder Program (CAF) will organize a new sire evaluation program to collect the necessary carcass data for genetic evaluation of Angus seed stock for carcass merit. Sires tested will be genetically compared for carcass traits of economic importance, and their genetic differences will be reported as expected progeny differences (EPD). The following are key guidelines for the CAF program, developed in cooperation with Dr. Doyle Wilson and associates at Iowa State University.

1. Progeny of the sire to be evaluated must have a contemporary group comparison to progeny of at least one and preferably two sires which have previously been evaluated for carcass merit. This evaluation can be conducted through the existing designed sire program or the CAF program. The use of these "reference" sires serves to tie contemporary groups together so that environmental differences can be accounted for in the genetic evaluation. A contemporary group is a set of cattle of the same sex that have been raised together and have received equal treatment.

2. The number of cattle required for the evaluation will vary depending on the accuracy desired. For example, 20 test sire progeny and 20 reference sire progeny from one contemporary group will give a marbling EPD accuracy of about .4. Thus a bull owner can choose a desired EPD accuracy for each test sire's evaluation and then breed the appropriate number of cows to produce the required progeny numbers.

3. All test and reference sire progeny (male and female) may be utilized in the evaluation. All non-replacement individuals may enter the program, such as non-replacement heifers.

4. An important refinement of the carcass evaluation procedures is slaughter at a constant compositional endpoint. Cattle must be slaughtered when the group averages .3 inch backfat or prior to 16 months or a maximum of 1,300 pounds live weight, whichever occurs first. This compositional endpoint is necessary in order to identify maximum marbling potential with minimum fat cover.

5. The genetic makeup and identification of the test herd is one area where it's not always possible to have the ideal testing environment. The following is a list of test herd alternatives from the most to the least desired:

- registered Angus cows—no selection of replacement heifers and all males castrated
- commercial Angus cows

- crossbred cows or cows of another breed
- registered Angus cows—selection of replacement heifers and steers are culled males.

Alternative (a) could be described as the current National Angus Cattle Evaluation, whereas the others would strictly be for genetic evaluation of Angus sires for carcass traits. To what extent alternatives (b), (c), and (d) influence the bias and accuracy of the evaluation relative to alternative (a) is unknown at present.

6. All financial arrangements will be between the test herd owner and the test sire owner at all phases of the program. The test sire owner may buy the cattle at weaning or after back-grounding, the test herd owner may retain ownership, or both parties may co-own the cattle. Regardless of ownership, the cattle must be allowed to be slaughtered at a lean endpoint.

The question arises as to where the cattle will be fed and slaughtered and who will collect the carcass data.

There are extension programs in several states specifically intended as a vehicle where breeders can get feedlot performance and carcass information. Breeders are strongly encouraged to participate in these programs, as the information is guaranteed to the greatest extent possible. Collecting carcass data when the cattle are slaughtered off the farm or out of a commercial feedlot is contingent upon packer cooperation and the availability of qualified personnel to collect the data.

These considerations put a great deal of uncertainty in actually obtaining carcass data from an unstructured program.

As expected, suitable test herds for this program are not readily available. However, several commercial producers have expressed an interest in contract breeding for the program. Breeders wanting to participate in CAF but not having the cow resources, should contact us at the Association for information on a potential cooperator.

There's no doubt that this program faces roadblocks. Sire evaluation for carcass merit is time-consuming and requires investment in feeding cattle. This investment becomes particularly thought-provoking given current cattle prices. Slaughtering at a constant compositional endpoint is difficult to monitor and collection of carcass data will require complete cooperation of all parties involved.

However, the move toward branded beef marketing programs and packers buying cattle based on carcass specifications readily illustrates the need to identify genetic differences in carcass traits. This will become important in order to efficiently merchandise slaughter cattle into specific product targets. Not all cattle will, nor should, fit the same product target. Genetic information on carcass traits will give a better insight on which target to go toward.

Increased production and economic return in the dairy industry due to use of genetically-predictable, specification seed stock is well documented. This genetic technology was adopted, modified, and used by the beef industry. Today, major beef breeds have genetic information—expressed as expected progeny differences (EPD)—for calving, growth, and maternal traits. Seed stock producers use EPD information to produce the type of cattle that their particular commercial customers can use. Both segments of the industry use EPD information to genetically tailor cattle to fit their specific production-management resources and merchandising arenas. Unfortunately, until carcass predictability is achieved, commercial producers are limited in their ability to breed for some product targets.

The 1987 National Angus Sire Evaluation Report lists 1,236 bulls for growth and maternal traits, and an additional 1,159 bulls in the young sire supplement. Carcass data is given for only 175 bulls. The intent of the CAF program is to broaden the existing data base on carcass merit of Angus cattle, to further enhance the marketing potential of Angus-bred cattle.