### **CERTIFIED** ANGUS **BEEF**



### Preparing for Carcass Contests Will Steer You in Right Direction

Although the National Junior Angus Association (NJAA) carcass contest is still months away, now is the time to make efforts to produce a high quality entry.

Preparing an animal for a carcass show is somewhat difficult due to factors, such as marbling, which cannot be seen until the steer has been processed. However, there are some indicators on the live animal that can be used to let you know if you're headed in the right direction.

When a steer is entered in a carcass contest, several evaluation factors are used to rank the carcass. Two of these are quality grade, which includes maturity and marbling score, and yield grade, which includes fat thickness, ribeye area, carcass weight and internal fat (KPH). Once a quality grade and yield grade have been determined, adjustments are made to rank the carcasses from most desirable to least desirable according to industry specifications.

### **Quality Grade**

Quality grade is a subjective measurement made by a USDA grader. It indicates beef palatability and is based on amount of marbling found within the ribeye. There are 10 marbling scores. These scores correspond to a final quality grade (table 1). Lean color and texture are also factors used in determining quality grade.

Most packing companies want more than 50 percent of the cattle they process to be within the Choice grade. Demand from retailers and restaurateurs, as well as price spreads between the Choice and Select grades, sends a signal that Choice carcasses are worth more than the lower quality grades. In fact, carcasses which are graded lower than Select are usually discounted substantially.

How do you know if your steer is headed for a Choice grade?

Several factors contribute to marbling. One of these is genetics. The Angus Sire Summary provides you with expected progeny differences (EPDs) on carcass traits including marbling. This offers an indication about a sire's progeny performance.

Other factors affecting marbling are time on feed, age and cattle breed. Research has indicated that each additional 30 days on feed increases the percentage of steers grading USDA Choice by 7-10 percent; however, you must be careful to keep an eye on fat thickness. Intramuscular fat (marbling) is the last stage of fat deposition; therefore, increased age generally is associated with increased marbling.

Certain breeds of cattle are known to deposit marbling more readily than other breeds. Angus, Holstein, Jersey and Longhorn cattle are noted for their ability to marble. While none of these factors are set in stone, they should provide general guidelines.

#### Yield Grade

Yield grade is defined as an overall measure of carcass cutability. To obtain this measurement, several factors must be evaluated, including fat thickness,ribeye area, external fat thickness and hot carcass weight.

Leanness has been a critical issue in the beef industry for some time. Many retailers feature beef cuts that are trimmed to one-fourth inch or less, and many packers are now offering quarter-inch trimmed products to their customers.

Research has shown that carcasses

need a minimum of .25 to .30 inches of fat thickness to prevent cold-induced meat toughening and to ensure beef tenderness. The target range for fat thickness is defined as .25 to .35 inches.

Fat thickness is obviously easier to identify on a live animal than marbling. As cattle become fatter, they become deeper, wider and smoother bodied. As a steer becomes fatter, it decreases carcass yields of closely trimmed, boneless, retail cuts. The measurement for fat thickness among slaughter cattle is taken on the fat covering the ribeye between the 12th and 13th ribs. This measurement will be adjusted up or down to reflect the fat cover on the entire carcass.

Ribeye area is used as a general indicator of muscling among beef cattle. Many restaurants and retail stores are now concerned with the size of ribeyes due to serving portion sizes. The target range has been defined as 12-15 square inches. Anything above or below this usually causes problems in portion sizes.

Live animals can also be evaluated for muscularity. Muscular cattle will generally exhibit thickness in forearms, gaskins

Marbling Score		Quality Grade
AB		Prime+
MAB		Prime
SLAB		Prime-
MD		Choice+
MT		Choice
SM		Choice-
SL+		Select+
SL		Select
SL-		Select-
TR & TR+		Standard+
PD+ & TR-		Standard
PD- 8 PD		Standard-
AB =Abundant MAB =ModeratelyAbundant SLAB = Slightly Abundant	MD =Moderate MT =Modest SM = Small	SL = Slight TR = Traces PD = Practically Devoid

### TABLE 1 MARBLING SCORES with CORRESPONDING QUALITY GRADES

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and rear quarters. Muscular cattle also have a wide stance.

Packers will generally accept carcass weights between 550 and 900 pounds; however, carcass weights between 700 and 800 pounds are preferred. Packers prefer cattle within a narrow weight range due to the highly mechanized systems of slaughter, fabrication and distribution. A carcass weighing more than 900 pounds tends to "not fit the box" and will sometimes cause problems in the packing plants.

The amount of internal fat is known as the percent of kidney pelvic and heart fat. Fat deposits around the kidney heart and pelvic cavity are left in the carcass during the slaughter process. This fat will be cut out during the fabrication process and will contribute to the carcasscutability. Therefore, it must be used in calculating USDA yield grade.

After all the factors used for calculating yield grades have been evaluated fat thickness, ribeye area, hot carcass weight and estimated percent of kidney, pelvic and heart— a final yield grade can be determined. The yield grades for beef carcasses range from 1 to 5 and predict

the percentage yield of closely trimmed, retail cuts. Yield grade 1 is the leanest, and yield grade 5 is the fattest.

### Forming a Game Plan

Probably the hardest part of producing quality beef cattle is being able to manage genetics, nutrition and production practices to produce carcasses which will fall into the acceptable ranges. It is difficult, but not impossible. Learning more about the factors involved in carcass evaluation is the only way to form a game plan that can produce a product to win a carcass show and, most importantly, be acceptable to the consumer.

### Kelly Frank, Director of Carcass Data Services

## Recommended Reading

"Recommended Procedures for Banking Beef Carcasses in Carcass Contests" and "Market Cattle and Beef Carcass Evaluation" by Daryl Tatum, Colorado State University.

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### A New Perspective for a Former NJAA Member

Growing up involved with the National Junior Angus Association (NJAA) was a wonderful experience. Although I have always realized the many benefits of my involvement, my transition into the working world has made them even more apparent.

This past October, I joined the Certified Angus Beef (CAB) Program as its food service marketing manager. My path to this role included a degree in animal science from Colorado State University, internships with the Washington Cattlemen's Association and Western Meat States Association, participation in college extracurricular activities, and, most importantly, my involvement with the NJAA.

The NJAA combined fun and friends with leadership and beef industry knowledge. In addition to the many programs offered by the NJAA, the possibilities of networking with beef industry leaders, including the American Angus Association staff, were endless.

Through various events such as the public speaking contest and team sales contest, I developed valuable presentation skills. In addition, my position on the NJAA Board provided me an opportunity to learn to communicate one-on-one with people and organize a productive meeting

ing. It was exactly this involvement that led me to discovering a position opening with the CAB Program. Although the NJAA created an awareness about the CAB Program, I am learning that it entails much more than carcass contests and cook-offs.

The CAB Program consists of many divisions that focus on different marketing areas while striving to achieve one main goal — increase the demand for registered Angus bulls. The commitment of each division staff within the detailed structure of the CAB Program is inspirational. It is exciting to be involved in a growing organization dedicated to improving the Angus breed and beef quality.

When I joined the staff, I began a whole new education process. My orientation started with learning the structure of the organization which involves the producer, packer, distributor, retailer, restaurateur and, most importantly, the consumer. I now truly understand the concept of "gate to plate."

Protecting the integrity of the Certifled Angus Beef trademarks, which are owned by Angus breeders, is another vital role I am learning more about. The CAB Program licenses all phases of the processing and distribution chain to ensure quality and consistency of products marketed under the Certified Angus Beef trademarks.

After learning all the details about the CAB Program, my next step is to jump into my role within the marketing division.

me grasp the corner of a big picture. addition to material development, I am also coordinating a promotional event with the American Culinary Federation, an organization of more than 20,000 chefs. A Certified Angus Beef Culinary Competition and educational seminar will allow great Program exposure to these culinary experts who demand a high quality, consistent product.



Lori Franklin (right) has joined the CAB Food Service division team. Bill Wylie (left) and Chris Beck in the Ohio office.

As food service marketing manager, I will be assisting Chris Beck and Bill Wylie, who are also former NJAA members, in creating and implementing marketing services for licensed food service distributors and restaurateurs.

As part of marketing a value-added product, the CAB Program develops promotional and educational material, sponsors training seminars and coordinates other events to assist food service licensees in promoting Certified Angus Beef<sup>™</sup> product.

With the 61 licensed food service distributors and nearly 1,000 licensed restaurants, it is important to keep enthusiasm charged with new promotional materials and updated information. I am specifically responsible for developing and updating these resources. My first project, creating an advertising kit, has been a learning experience.

Time, patience, research and being willing to ask lots of questions has helped

As I reflect on the many activities I have been involved with, NJAA was very valuable in my professional preparation. It allowed me to play an active role in the beef industry from production to the end product. Now, I am looking forward to marketing and promoting the product we all strive to produce, through genetics and proper management.

There are a world of opportunities available to NJAA members. I encourage all young Angus breeders to take advantage of the programs and offices available, as well as the people who are willing t share insight into the beef industry. Being involved in these activities will putNJAA members a step ahead.

It's exciting to look toward the future of the beef industry and the roles junior will be qualified to play.

-Lori Franklin