

Colvin Scholarships Awarded

Phipps, Gray earn honors with essays.

by Jennifer Kiko

Two students were recently honored from among 33 applicants to receive awards from the 2006 Colvin Scholarship Fund. Thanks to generous fundraising from the *Certified Angus Beef*® (CAB®) brand's licensees and staff, two scholarships were awarded this year. Wravenna Phipps, Kearney, Neb., was awarded \$2,500, and Zebadiah Gray, Toledo, Iowa, received \$1,000.

To enter, applicants were required to prepare an essay of 1,000 words or less, answering the following questions:

“What challenges do you see facing the beef industry in delivering a desirable eating experience 90%-100% of the time? What are your solutions?”

Phipps is a junior at Oklahoma State University (OSU), majoring in agricultural communications. She carries a 4.0 grade point average (GPA). She plans to attend graduate school and earn a master's degree in marketing or public relations. Her many activities include membership in the National Junior Angus Association (NJAA) and the Nebraska Junior Angus Association. Phipps has also participated on the OSU livestock judging team and is a member of the OSU Agricultural Communicators of Tomorrow (ACT) chapter, Block and Bridle, and university Agricultural Student Council.

Phipps has also been a trainee at the Tyson/IBP processing plant, tagging carcasses and recording data for U.S. Department of Agriculture (USDA) graders. Her ranch experience includes tagging; vaccinating; calving; and assisting with artificial insemination (AI), heat detection, branding,

feeding and marketing.

Gray is a junior at Iowa State University (ISU), majoring in animal science and economics. He carries a 3.65 GPA. After graduation, Gray would like to continue to develop his seedstock operation, providing cattle to satisfy all beef market levels, from feeder calves and seedstock to the steaks and burgers sold in the grocery store. He plans to remain active in state and national cattlemen's organizations, as well as contributing to beef research and program development. He intends to help beef producers promote, market and produce a nutritious and healthy product for consumers.

Gray is a member of the NJAA Board. He is also active in the Iowa Junior Angus Association and is an ISU meat judging team assistant coach and Youth Beef Team ambassador. He is also president of the ISU Collegiate Beef Team and helps coordinate monthly promotions at local grocery stores in Ames, Iowa.

Currently, Gray is co-owner and manager of 100 purebred Angus cows for Gray's Angus. He is responsible for recordkeeping, weighing calves for performance records, selecting AI sires and planned matings, marketing of seedstock to commercial and purebred operations, assisting customers in selecting breeding stock to fit their program needs, and general labor. He is a certified ultrasound-processing

technician.

Both students have been invited to attend the brand's annual conference in Seattle, Wash. Their essays are presented on the following pages.



What challenges do you see facing the beef industry in delivering a desirable eating experience 90%-100% of the time? What are your solutions?

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Only the Very Best

Essay by **Wravenna Phipps**

Winston Churchill once said, “I am easily satisfied with the very best.” It is a fair assessment that most people feel the same way. However, for the beef industry, this creates some challenges. The National Cattlemen’s Beef Association (NCBA) has found that consumers are satisfied not only by the best, but consistently the best every time they eat beef. As producers in the beef industry, it is our job to meet these consumers’ expectations in order to deliver a desirable eating experience 90%-100% of the time.

Consistency is what consumers are demanding. Most of the time, when consistency is not met, it is because of a lack in tenderness. According to the U.S. Department of Agriculture (USDA), this lack of a consistent tender beef product could cost the beef industry up to \$250 million annually. With consumer satisfaction being the driving force behind the purchase of beef products, focusing on tenderness must be a primary goal. The 1998 National Beef Tenderness Survey indicates that inadequate tenderness, flavor and juiciness are all quality issues ranked among the top 10 that restaurateurs, purveyors and retailers feel must be overcome.

The main cause of tenderness variation is collagen. This is due to the fact that carcasses originate from multiple breeds and various production systems, which results in a variation of tenderness. Typically, tenderness increases as marbling increases. Research has shown a positive relationship between marbling and beef palatability. Marbling can explain about 5% of the variation in palatability traits.

Demand for meeting consumers’ needs and expectations with product quality and consistency is an area that continuously needs improvement. NCBA set a goal of “reducing consumer dissatisfaction due to variability in eating quality (tenderness) by 50% by the year 2005.” If undesirable eating experiences continue to occur, the perception of quality in beef products will be lost.

There are many things that the beef industry can do in providing a solution to these challenges. Improving tenderness can be done through two types of education: educating the producers and educating the public.

By providing more information along with the advantages of implementing proven ideas, American cattlemen will be able to meet the consumer’s demand. The

beef industry needs to better convey the importance of increasing the level of vitamin D₃ fed to beef cattle, palatability differences between different biological types of cattle (*Bos indicus* vs. *Bos taurus*) and that high-grain rations all have a direct association to a more tender product. Additionally, the use of genetic predictabilities has and will continue to play a vital role in delivering a consistent, flavorful and tender product.

I feel we need to encourage more use of expected progeny differences (EPDs). For example, the dollar value indexes (\$Values) that the American Angus Association has available should not just be used as predictors for purebred breeders. Just as importantly, this type of information benefits the commercial cattle industry as well, when used to genetically improve herd quality.

By understanding the consumer’s needs and wants, producers will be better prepared to meet these needs with the product they raise every day. However, improving beef consistency does not stop here. The industry also needs to focus its attention on educating consumers as to how they affect the quality and tenderness of the product they consume.

Most consumers lack education as to which beef cuts and how much fat associated with the product will provide them with the eating experience they desire. Although cuts from the loin have established a reputation for tenderness, consumers also desire a flavorful and juicy product. Because of this, consumers need to be informed that fat left on the product during cooking makes their eating experience more desirable. I feel the beef industry needs to do a better job emphasizing that fat acts as a storehouse for aromatic compounds that are released during cooking. Most people do not realize that fatty acids experience chemical changes during cooking and produce potent flavor compounds. This is the consistent flavor consumers desire from their beef product.

Additionally, many uneducated consumers often cook beef products past the optimum degree of doneness that would ensure adequate tenderness. Because of this, moisture is lost, causing the product to become dry. Furthermore, contractile proteins within the muscle become tougher as the product gets dryer. The facts are clear, but until we spread the message, consumers will continue to believe that the inconsistencies they experience with their beef products are solely due to the meat itself.



Even though information is available to consumers with cooking instructions, most people will still spend more money on a product that has either been enhanced or is part of a branded beef program. I feel the reason *Certified Angus Beef*[®] (CAB[®]) is leading the way in these programs is because of the consistency that accompanies its trademark. I also believe, however, that we need further promotion of enhanced beef products as they are becoming more popular. This is because enhanced products also provide consistency consumers demand.

Enhanced beef products are injected with a phosphate-based solution. Not only is the meat tenderized by the protein injected through the solution, but the needle injection itself acts as a mechanical tenderization method. This increases water-holding capacity, which keeps the meat from drying out and results in a more consistent, palatable product.

I believe if we want consumers to have a desirable eating experience 90%-100% of the time, we need to focus our attention on consistency. It is evident that this is what consumers are demanding from their beef selections. I feel it is important to educate all producers on how they can meet these demands. Yet, we must not neglect that continued consumer education and awareness is needed to assist them in their selection choices and cooking decisions in order to satisfy their needs.

I am confident that when the beef industry establishes and maintains consistency, all consumers will agree with Winston Churchill by saying, “I am easily satisfied with the very best, and that’s beef!”

The Power of Communication

Essay by Zebadiah Gray

I think that a major challenge that is facing the beef industry when it comes to delivering a desirable eating experience 90%-100% of the time is that we are not really a vertically integrated industry. Now, I am not saying that it is necessarily a bad thing. The lack of integration is one of the unique qualities that the beef industry has that allows so many family farms to stay in the business. But, there are some downfalls.

In the beef industry, there are many different profit centers. For example, we have seedstock producers, commercial producers, feedlots, packing plants and retail stores. The problem arises when all of these different sectors of the industry market their product.

Most are marketed in different ways. Seedstock producers usually market their cattle by the head. Commercial producers market their cattle by the pound. Feedlots market their cattle by quality and cutability. Packers market the carcasses according to quality, cutability and different cuts of meat. So, as you can see, nobody is really producing the same thing, right? Wrong!

Everybody is producing *beef!* Eventually, that beef is going to be marketed as a tasteful, high-quality, high-protein source. As producers, we must deliver a product that is desirable to the consumer.

Now, I understand that it is hard for a commercial man to focus on improving the quality of the meat in the animals that he/she sells when selling them by the pound. However, just consider the simple economic principle of supply and demand determining price. If consumers have a bad eating experience, then beef will most likely not be their first choice the next time they eat. This leads to a decrease in demand and eventually a fall in prices. It is imperative that we have all sectors of the industry working together to ensure that we give consumers a pleasurable eating experience.

Accomplishing this task is not easy. We must have open communication between all sectors, which I personally believe has been one of the biggest faults in past years. Nonetheless, I have seen significant improvement in this area. I believe this is one

of the reasons why we are experiencing the phenomenal prices today. I will be the first to admit that there are several other reasons, such as proactive promotion campaigns and new product development. However, everyone has to communicate in order to ensure growth and a sustainable industry. Packers have to relay to the seedstock producers what consumers are demanding, so they can continue to make genetic progress in a positive way.

I believe cattle producers need to focus on the carcass and ultrasound merits of the breeding stock they purchase for their herds. We have an unbelievable amount of technology available to us, and we need

to utilize it. When selecting a herd bull, for example, producers should pay close attention to not only the bull's phenotype, but also the marbling, ribeye area and leanness of the bull. These expected progeny differences (EPDs), when backed by strong accuracies, prove to be very useful tools to breeders to improve the quality of their cattle in a

relatively short amount of time.

This brings us to another big problem that really concerns me — tenderness. Tenderness is one of the most important quality factors to a lot of people. Yet, studies have shown that up to 25% of all USDA Choice steaks are too tough to be chewed, which represents a major problem. Marbling is supposed to be a good indicator of tenderness, but if these studies are correct, it may not be good enough. This indicates to me that there are some flaws in our grading system, and we may need to re-evaluate it.

We have to develop some sort of an economical way to test for tenderness that is fast, cost-efficient and accurate. I know — easier said than done. However, just imagine if we could eliminate that really tough beef from the markets. There has been a lot of research with the Warner-Bratzler shear force (WBSF) test, and I think that it has enormous potential to aid in our effort to give consumers a pleasurable eating experience. If we could get the WBSF test to be cost-efficient and work at line speed,



then maybe it could be incorporated into the pricing grid to reward those cattle with good tenderness and discount those that are tough.

Secondly, there is a new tool that is a little unproven because it is still fairly new. Nevertheless, it could prove to be an invaluable resource. I am talking about the GeneStar® test. This is a DNA test that is based on two naturally occurring genes involved in the postmortem tenderization process: calpastatin and calpain. I am anxiously waiting for more data from this test. If this test is proven valid, it will help us identify genetically superior animals for tenderness, which has been very difficult in the past.

In conclusion, beef represents half of all the red meat produced in the United States. It is the No. 1 customer-preferred meat, and I would like to keep it that way by continually providing a pleasurable eating experience to every customer every time. Seedstock producers and commercial producers need to start thinking in terms of a final product. Moreover, the packing industry needs to ensure they reward those producers who go the extra mile to produce a higher quality product. We must keep the communication lines open between all sectors in the beef industry to ensure that we keep changing to meet consumer demands. All in all, the issue of attaining top-quality beef to ensure that the consumer has a pleasurable eating experience every time is not all that unreasonable. The answer is right in front of us. Producers must take advantage of new technology such as ultrasounding, carcass and DNA testing to select the genetics that will perform on the rail and on the plate.



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