

Verbal Communication

NJAA members exhibit poise during prepared public speaking.

compiled by Kasey Brown, associate editor



► Alexandria Cozzitorto presents her point of view to the panel of judges.

CANDID PHOTOS BY B BUDGET BEJAN



► Sydni Lienemann gives her speech, for which she placed third in the senior division of the prepared public speaking contest.

Communicating your point via spoken word or written word is an important life lesson. It is a lesson that many National Junior Angus Association (NJAA) members learn well through their tenure with the organization. The winners of the National Junior Angus Association (NJAA) Prepared Public Speaking Contest are certainly preparing for adult life's communication needs. They competed during the National Junior Angus Show (NJAS) in Grand Island, Neb., July 3-9.

Junior and intermediate division contestants could speak on any subject pertaining to Angus cattle or the beef industry. Exploration of any and all phases of the industry were encouraged, with the topic prompts of current affairs, policies and trends. Senior division contestants were asked to address how beef producers would be affected if the proposed dietary guidelines were implemented.

Speeches in the junior division were to be between 4 and 6 minutes in length, and intermediate and senior division speeches were to be 6-8 minutes long.

This year's winners were Carson Woodworth, Enterprise, Kan., junior A division; Kelsey Theis, Leavenworth, Kan., junior B division; Jace Stagemeyer, Page, Neb., intermediate A division; Darcey Hilburn, Welch, Okla., intermediate B division; and Will Pohlman, Prairie Grove, Ark., senior division.

Pohlman won a \$1,000 scholarship from the *Argus Journal* for his senior division win. The winners of the younger divisions each won \$125.

Here are their winning speeches.



Why is Your Hair Black? Genetics!

by Carson Woodworth, junior A winner

Have you ever wondered why your bull or heifer has the coat color it does? Or why it has long or short hair? The answer is genetics. Hi, my name is Carson Woodworth. I am a lifetime member of the National Junior Angus Association, and this is my first time attending the National Junior Angus Show to participate. Today I am going to tell you about genetics and its history. I will share with you about DNA and chromosomes and how parents pass traits to their offspring. I will also discuss the heredity of coat color in cattle. Finally I will talk about genetic conditions in Angus cattle and the heritability of traits in Angus that are expressed in EPDs (expected progeny differences).

First, what is genetics? Genetics is the study of genes, genetic differences and the passing of traits from parents to their offspring.

Now we need to know who discovered genetics. Gregor Johann Mendel is the father of genetics. We call him the father because he founded the initial laws of genetics using pea plants. He was born in Austria on July 22, 1822. He invented laws of inheritance that were the basis for the Punnett square that is used today as a visual to predict the heritability of traits. Mendel bred a tall pea plant with a small pea plant to make four mid-size plants. He then bred them together and made one big plant, two mid-sized pea plants, and one small plant. This was an early

hybridization experiment.

Next we need to discuss DNA and chromosomes. DNA, or deoxyribonucleic acid, is a molecule that carries most of the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms. You usually see DNA illustrated as a strand in the form of a double helix. To make DNA, you need a base of either adenine, guanine, thymine or cytosine. In the nucleus of each cell, the DNA molecule is packaged into thread-like structures called chromosomes. Each chromosome is made up of DNA tightly coiled. Chromosomes are found in pairs. A human has 23 pairs of chromosomes and bovines have 30 pairs in each cell.

As I illustrated a little earlier with Gregor Mendel's research with pea plants, traits can be passed through genes from one generation to the next. Some genes are dominant in their appearance, while others are recessive. Common human traits we talk about being passed down include eye color, hair color, and straight vs. curly hair. In cattle we think about coat color and hair length. However, we know there are many more traits that are passed from parent to offspring.

In many breeds, coat color was a selected trait and became part of their breed identity. Geneticists have been fascinated by the inheritance of coat color and patterns since

the mid-1900s. Several genes can interact and cause deviation in shades of color and solid vs. patterned colored bodies of cattle. Recent DNA testing has helped discover some of the many genes that can affect coat color.

All living things have genetic abnormalities. Through science and genetic research, we are able to learn more about them. Geneticists have determined that the bovine genome has hundreds of mutations. The Angus breed is currently testing for eight genetic conditions. One condition being tested for is Developmental Duplication, more commonly referred to as DD.

The American Angus Association has established a number of traits that are heritable and measurable. These traits are interpreted in expected progeny differences and \$Values. Included in these are production, maternal and carcass traits.

Today I have shared with you what genetics is and its history. I have also described DNA and chromosomes. I touched on the passing of traits from parent to offspring and how certain traits such as coat color or genetic conditions are passed through genes. Finally, I focused on the EPDs reported by the American Angus Association. From this, I hope you learned something about genetics and appreciated my presentation. If you have any questions, I would be happy to answer them. Thank you!

Is There a Cow in my Marshmallow?

by Kelsey Theis, junior B winner

There's a cow in my marshmallow? What? When you hear beef cattle, what comes to mind? Burgers? Steaks? How about footballs? Jello? Buttons?

Hello. I am Kelsey Theis and today I am going to share with you some of the things I have learned about beef byproducts. If you have a beef animal that weighs 1,000 pounds (lb.) — 640 lb. of the animal will be used for meat products such as steak, roasts and hamburger. This means 64% of the animal is used for meat. However, 99% of the cow is utilized for meat and other products.

Myth: Cattle are only used for meat.

Fact: Cattle provide us with more than steaks and hamburgers. They also provide byproducts that you and I use every day.

So, what is a beef byproduct?

A beef byproduct is a usable product other than meat. They are found in three forms: (1)

edible, (2) inedible, (3) medicinal.

At this point, you're probably wondering, "What do beef byproducts have to do with me?"

I am hopeful that by the end of my presentation, you will be asking yourself, "What don't beef byproducts have to do with me?" The fact is we depend upon cattle for nutritious beef and their nearly endless supply of resources! As I previously stated, we use nearly 99% of a beef animal for something.

Edible byproducts are those that we can eat or use in something we eat.

You normally think of beef as a hamburger, a steak or a roast, which are served at mealtime, but there are other edible parts besides the protein-packed muscle. The variety meats, such as liver and hearts, are just two of the many alternatives that are used in gourmet dishes. There are also edible

byproducts that are not quite so obvious.

Do you know that gelatins in products such as ice cream and yogurt are made from hooves, horns, hide and bones of the cow? People depend on cattle for ingredients in many food products such as sausage, candies, chewing gum, cookies, gelatin in salads, ice cream, yogurt, mayonnaise, oleo shortening and even marshmallows.

Intestines provide the makings for natural sausage casings. Did you know if you strung one year's worth of hot dogs end to end around the world, you would go around the world 16 times?

Other types of byproducts

Inedible byproducts are obviously those used in things we don't eat.

Probably the most common is the cowhide

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used in making leather, felt and other textiles. It also provides a base for many ointments, binders for plaster and asphalt, and a base for the insulation material used to keep your house cooler in the summer and warmer in the winter.

And, of course, there are those footballs, basketballs and volleyballs made from cowhides, too. Last count, you could get 12 basketballs or 18 volleyballs, or 144 baseballs, or 12 baseball gloves, or 20 footballs from one cow hide. It sure makes me wonder why they call it the old "pigskin."

Last, and probably the most important, cattle are a virtual medicine cabinet.

Many medical products are made from animal byproducts. Ointments for burns and first aid creams may contain beef byproducts.

Anti-rejection drugs are used when someone has a heart transplant, liver transplant or even a ligament in your knee to help your body accept the new organ.

Insulin is utilized by diabetics. It can be synthetic, which means it is man-made, but it can be derived from the pancreas of cattle. There are over 5 million diabetics in the United States who can thank the beef industry because it takes the pancreases of 26 cattle to provide enough insulin to keep one diabetic alive for a year.

Hundreds of drugs are made with cattle byproducts to make childbirth safer, settle an upset stomach, prevent blood clots, control anemia, relieve symptoms of hay fever and asthma, and help babies digest milk.

This is only a brief description of beef

byproducts. New uses are being discovered almost daily.

Now, when you hear, "Where's the beef?" I hope you will think:

- ▶ In the hospitals and pharmacies.
- ▶ In the sporting-goods stores and art-supply shops.
- ▶ In my firecrackers on the Fourth of July.
- ▶ All over my house in soaps, in my toothbrush, on my face and hands in lotions, and even in the beautiful music I listen to.

So, you see, a cow is not *just* a cow.

There are multiple ways in which cattle help us live every day. Just look in the mirror; look around you. There's even a cow in your marshmallow!

A Spoonful of Sugar

by *Jace Stagemeyer*, intermediate A winner

I am ready. I only own seven cows and three bred heifers, but I have an established relationship with my local veterinarian. I am ready.

I am a small producer and my feed needs are limited, but I work with a feed dealer who knows their product and keeps current inventory. I am ready.

Even as a young cattleman, I know the value of accurate recordkeeping and a thorough filing system. I am ready for the veterinary feed directive.

Sure, at one time it was relatively easy to give antibiotics to food animals — almost as easy as using a spoonful of sugar to help the medicine go down. But the fairy tale is over. Mary Poppins is no longer singing. The veterinary feed directive is coming. As cattle producers, we need to know what the veterinary feed directive is, who is impacted by it, and how the veterinary feed directive affects former management practices.

Antibiotics have been used for the last 70 years to treat infectious diseases. However, these drugs have been used so widely and for so long that the bacteria have adapted and the antibiotics are less effective. This is called antibiotic resistance. In other words, the bacteria are resistant to the antibiotic. According to the Centers for Disease Control and Prevention (CDC), each year in the United States, at least 2 million people become infected with bacteria that are resistant to antibiotics. This is a serious threat to public health.

The U.S. Food and Drug Administration (FDA) has recently taken important steps to

slow antibiotic resistance in animals and humans through regulation. Antibiotics that are given in feed or water are categorized based on how important they are to human health. These products were once available over the counter, but starting Jan. 1, 2017, USDA will require a veterinary feed directive, or VFD. But what is a VFD?

Explaining the VFD

Think of it like a prescription. A VFD is a written statement from a licensed vet. It will tell what animals will be treated, the drug to be used, the feeding rate, and the length of treatment. Supercalifragilisticexpialidocious! It is a government ruling that can be confusing! Basically, if an antibiotic that is used to treat cattle is also used to treat humans, it needs to be given under a vet's supervision, or VFD.

Knowing what a VFD is is one thing, but it is also important to know who is impacted by it. Obviously, veterinarians have a big part in the VFD process. They fill out the VFD forms. Feedmills and distributors will also be affected. They will be required to have a properly completed VFD before selling the feed, plus keep an accurate record. New labels will also be required on all feeds containing medically important antibiotics.

As producers, we need to be sure to follow the directions on the VFD — feeding cattle the prescribed amount of feed for the right number of days. According to Kerry Keffaber, veterinarian, Elanco, "As a producer, it will be critical to have an ongoing relationship with a veterinarian who knows your herd, its health

needs and understands the VFD process." For my Angus show heifers, I use Dr. Mike Woods. He knows me and my cattle, and I can trust him to prescribe what is best.

The veterinary feed directive will also affect former management practices. Through my involvement in the Angus Association, I have learned the value of accurate recordkeeping, like birth and weaning weights. Starting in 2017, producers will need to keep all VFD forms for two years. When my heifers were starting to get watery eyes, I went to the farm supply store, picked up a bag of CTC (chlortetracycline), and fed it as directed.

This "song and dance" is a thing of the past. I now will need to consult with my veterinarian before any such action is taken. This is definitely a change in our independent way of life, but don't worry. Let it be clear, it's not a ban on its use, just a little more regulation. If you have a pen of newly weaned calves that need to get over the hump or a battle with foot rot, we will still be able to treat through the feed, but not without consulting your vet and obtaining a VFD. This is really what the VFD boils down to.

Antibiotic resistance is complex. All of us involved in using them in humans and animals have a responsibility to ensure they continue to work. We need to know what the veterinary feed directive is, who is impacted by it, and how the veterinary feed directive affects former management practices. I am ready. Are you?

Ag Gag Laws

by Darcey Hilburn, intermediate B winner

In a rational world, it would be considered impressive to be able to feed your family entirely by yourself through your own hard work and determination. Sadly though, Bob Benner's story is much different. Seventy-five-year-old Benner has lived on his small farm near Long Island, N.Y., since 1977. Living around an urban community, he decided to host educational tours on his farm — a decision he'd unfortunately come to regret.

On April 2 of this year, Benner hosted a small tour on his farm, which meant introducing the participants to Minnie the cow. Although Minnie was being treated humanely, a tourist was disgusted to find out that she would be used to feed Benner's family of six. She started a campaign to remove the cow from the farm and, after receiving numerous mail, email and phone threats to his farm, family and way of life, Benner surrendered the cow.

The Benner family lost a battle that day, but some farmers are losing their entire farms, careers and lifestyles due to animal activists working undercover to collect highly edited videos of commonly used and

accepted practices to portray inaccurately to the public as abusive and unjust.

Stories like this have not been uncommon in the past few years. It has become increasingly difficult for farmers to feel comfortable and confident in their employees or with allowing the general public on their farms. Some states have found and acted on a solution to end this problem and save the agricultural industry: "ag gag laws." When discussing this issue, it's important to teach farmers to protect themselves in states where they're not protected by the law, inform people on the goals of these laws, as well as discuss how to encourage these laws in other states.

Hiring new employees is always a difficult procedure. For farmers not protected by an ag gag law, it has become an increasingly tough, dangerous and possibly career-threatening process. Undercover activists fill out applications with fake information and lie about their intentions, often stating they "just want experience."

An advocacy group composed of farmers and farm businesses, Animal Agriculture

Alliance, has put together a list for hiring farmers to use as a reference of protection when hiring new workers. Some important steps for protection before, during and after hiring an employee are ensuring proper care to the animals at all times, contact all references, establish a relationship with local law enforcement, and investigate any request for information on your operation. Reasons for concern specifically when hiring or with farm visitors are unusual behavior from new workers staying past their daily shift, workers or volunteering to work for little or no pay to "gain experience," workers or visitors befriend management to ask security and time schedule questions, or any mismatches in information.

Goal of these laws

Many people are unaware of the goals of these laws. Ag gag laws are not only put in place to protect farmers from undercover activists filming without the owner's consent, but also to make it a misdemeanor to lie on your application with intent on harming the

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PREPARED PUBLIC SPEAKING

The National Junior Angus Association Prepared Public Speaking Contest is designed to equip members with the abilities of communication required to succeed in the beef industry and in life. In this contest, juniors prepare a speech in advance and are judged on both the content of the speech and their delivery.

The *Angus Journal* sponsors the senior division and awards monetary prizes to the winners. For their topic, senior division contestants were asked to address how beef producers would be affected if the proposed *Dietary Guidelines for Americans* are implemented.



► Winning the junior A division are (from left) **Carson Woodworth**, Enterprise, Kan., first, and **Lauren Wolter**, Aviston, Ill., second. Not pictured is **Bennett Gordon**, Whitewood, S.D., third.



► Winning the junior B division are (from left) **Kelsey Theis**, Leavenworth, Kan., first; and **Clay Pelton**, Paradise, Kan., second. Not pictured is **Matea Gordon**, Whitewood, S.D., third.



► Winning the intermediate A division are (from left) **Jace Stagemeyer**, Page, Neb., first; **Alexandria Cozzitorto**, Lawrence, Kan., second; and **Mardee Sadowsky**, Eagleville, Mo., third.



► Winning the intermediate B division are (from left) **Morgan Woodbury**, Quenemo, Kan., second; and **Darcey Hilburn**, Welch, Okla., first.



► Winning the senior division are (from left) **Sydni Lienemann**, Princeton, Neb., third; **Keegan Cassidy**, Bloomington, Ill., second; and **Will Pohlman**, Prairie Grove, Ark., first.

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business. While critics are arguing that this infringes on freedom of speech, the law isn't designed to restrict reports on actual animal cruelty. With the law in place, it is still legal and encouraged to report animal abuse to the authorities to be investigated; it simply cannot be filmed and publicly posted without the owner's consent.

Currently, nine states have passed an ag gag law since 2012, but only seven remain active. Iowa, Idaho, Kansas, Missouri, Utah, Montana, Wyoming, North Carolina and North Dakota have all passed the law, while recently Idaho's law was reversed and Utah's is

currently in trial. In January, activists challenged North Carolina's newly enacted law, and it is also expected to go to court soon.

"Agriculture is one [the] of most important industries. It's sort of a protection mechanism that's saying we do not want to put up with this in our state," said Iowa State Senator Joe Seng, when referencing the law and undercover activists. With only seven states with active ag gag laws, it is important to encourage new states to pass a similar law for the protection of an industry that is important to all of us. One way to support these laws and encourage new laws is to join

organizations like the Animal Agriculture Alliance.

Thomas Jefferson once stated, "Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals and happiness."

If agriculture is our wisest pursuit, why aren't we doing more to protect it? As many states continue to take no action against radical animal-rights activist groups, more and more farmers are unfairly profiled and ultimately put out of business. It is time for more states to take action and take the whistle from the whistleblower.

The Dietary Guidelines and Producers: The Impact of the Fork on the Farm

by Will Pohlman, senior winner

Every four years, we have an election, the Olympics and a leap year. A lot can happen every four years for most people. But for farmers and others in the food industry, a lot can change every five years, as well. Twice a decade, the USDA and the Department of Health and Human Services release the *Dietary Guidelines for Americans*, the foundation for federal nutrition policy. These guidelines directly shape many government programs and indirectly affect the food industry and American's diets at large.

Since 1980 the USDA and the Department of Health and Human Services (HHS) have jointly released the *Dietary Guidelines for Americans* in an effort to address both malnutrition and overconsumption that was a concern in the '70s. Originally affecting the famous Food Pyramid, the guidelines now direct the content of the government's My Plate, which informs the general public about nutrition.

Effects of guidelines

Additionally, the *Guidelines* affect the \$16 billion National School Lunch Program, which serves 31 million children daily, as well as SNAP or food stamps, which helps 46.5 million people in 22.7 million households nationwide. With so many consumers directly and indirectly affected by these guidelines, there's a lot to gain for the farmers who produce the recommended food and just as much to lose if one's product isn't advised.

The content of the *Dietary Guidelines* has

been quite dynamic, however — helping and hurting many food producers. The initial 1980 guidelines were largely influenced by the leading figure in nutrition at the time, Dr. Ancel Keys. Keys was a firm believer that saturated fat and cholesterol were linked to heart disease. He published the now infamous Seven Countries Study that cherry-picked countries with high fat consumption and high heart disease while conveniently ignoring those that contradicted the hypothesized link.

As a result, the *Dietary Guidelines* have long recommended consumers monitor cholesterol, particularly from eggs, and saturated-fat consumption. This has resulted in a red-meat scare that can still be seen today, as well as a 30% decrease of egg consumption per capita that has dramatically affected egg farmers. This long-standing recommendation has recently been disproven, and the 2015 *Guidelines* actually cite studies showing little to no link between diet and cholesterol.

On the other hand, the *Guidelines* can help producers, as well. Recently the guidelines have recommended whole-grain over refined-grain consumption and the effects can be seen on nearly every label in grocery stores quantifying the whole-grain content of each product.

The guidelines also appear to be leaning further away from red meat in particular, but meat in general. The traditional "Meat" category of the Food Pyramid has been replaced with "Protein" on the most recent

MyPlate. While attempting to relay that protein can be obtained from multiple dietary sources, including plants for the growing vegetarian population, there's little doubt that the *Guidelines* have been moving away from overtly recommending meat consumption. This is a problem for beef producers.

This time last year, the 2015 *Dietary Guidelines* looked to be a disaster for beef producers that continue this trend of distancing consumers from red-meat consumption. Before the official guidelines are released, an Advisory Committee made up of medical doctors, academic doctors, and other experts in nutrition and public health compiled a report of recommendations based upon the current scientific literature.

Released last February, the Advisory Committee's report explicitly recommended a diet "lower in red and processed meat" and also contained a chapter devoted to food sustainability and safety, which targeted beef as an environmental and safety hazard. The committee had clearly overstepped the focus of its report and was reigned in by the secretaries of the USDA and HHS.

The comments about limited red-meat consumption were included due to the committee's refusal to include the BOLD study (Beef in an Optimal Lean Diet), a gold-standard study that showed up to 5 ounces (oz.) of lean beef per day could be a part of a heart-healthy diet. This exclusion was in spite of the fact of lobbying by the NCBA (National Cattlemen's Beef

Association) and Beef Council and a refusal to answer questions surrounding the exclusion.

Include the science

The final approved guidelines, however, thankfully rectify the scientifically unsound recommendation by the Advisory Committee and is a win for beef producers. First, the clause about low red-meat consumption was removed, and consumption of lean meats was encouraged. Also, the longstanding recommendation to limit cholesterol to 300 milligrams (mg) per day was notably absent, an indirect win for beef consumption. These guidelines will keep beef on the plate as a part of government programs, as well as consumer choice for the time being.

However, the guidelines continue to encourage limited saturated-fat intake. Even though beef producers have been able to produce leaner beef that contains 51% heart-healthy monounsaturated fat, many consumers still are wary of red meat due to this recommendation.

The response by the NCBA and Beef Council during meetings of the Advisory Committee trying to include the BOLD study, as well as following the release of the initial report, has been truly exceptional. They have secured another five years of beef on the forks of Americans. However public perception of this win has been mixed. Wary of "Big Ag," many consumers see this overturning of the Advisory Committee's recommendation as corrupt politics over sound science. It's important that we as producers share the science and story of beef production to help change this perception.

As we celebrate the 2015 *Dietary Guidelines*, it's important to look forward toward 2020. As we lay the groundwork for the continued fight to keep beef on the plate, it's crucial for both the beef industry as a whole and individual producers to keep public perception in mind. While NCBA needs to continue lobbying for producers, it's important that we share our story with consumers to keep public opinion on our side. Particularly, it's important that we share the nutritional benefits beef has to offer, as well as beef production's sustainability. People trust farmers, and producers need to use that trust to relay the benefits of beef in a healthy, environmentally friendly diet.

For farmers and beef producers, a lot can change every five years. While the 2015 *Dietary Guidelines* have by and large kept beef a part of the American diet, there are no guarantees for future recommendations. It's important that we as producers, as well as the

industry at large, share the important role beef has in a nutritious and healthy diet. It's crucial to protect beef both from a policy

standpoint, as well as public perception, because in a consumer-driven industry the fork directly affects the farm.



EXTEMPORANEOUS PUBLIC SPEAKING

The National Junior Angus Association Extemporaneous Public Speaking Contest is designed to develop the ability of contestants to express themselves on a given topic without having prepared a presentation in advance.

Winners of the intermediate A and intermediate B divisions each receive a Harvey Rattey bronze sculpture in memory of the late Pat Grote, former American Angus Auxiliary president and a supporter of youth.

The winner of the senior division is awarded a custom-engraved Artisan belt buckle in memory of the late Richard L. "Dick" Spader, former executive vice president of the American Angus Association.



►Winning the junior A division are (from left) **Carson Woodworth**, Enterprise, Kan., first; **Jacob Wickard**, Greenfield, Ind., second; and **Brenlen Humpert**, Windthorst, Texas, third.



►Winning the junior B division are (from left) **Ethan Blevins**, Greenup, Ky., first; **Cooper Free**, Salado, Texas, second; and **Jordyn Wickard**, Greenfield, Ind., third.



►Winning the intermediate A division are (from left) **Mardee Sadowsky**, Eagleville, Mo., first; **Lauren Parks**, Brookfield, Mo., second; and **Eva Hinrichsen**, Westmoreland, Kan., third. Sadowsky received the Harvey Rattey bronze sculpture in the name of the late Pat Grote for her win.



►Winning the intermediate B division are (from left) **Cale Hinrichsen**, Westmoreland, Kan., first; **Hannah Rose**, New Palestine, Ind., second; and **Gabrielle Simpson**, Tupelo, Miss., third. Hinrichsen received the Harvey Rattey bronze sculpture in the name of the late Pat Grote for his win.



►Winning the senior division are (from left) **Cooper Sadowsky**, Eagleville, Mo., first; **Will Pohlman**, Prairie Grove, Ark., second; and **Sydnee Gerken**, Cashion, Okla., third.



►For her first-place win in the senior division, **Cooper Sadowsky** (right), received the custom engraved Artisan belt buckle in the name of the late Richard L. "Dick" Spader, presented by Sheri Spader.