



# The Right Direction

Nebraska Beef Quality Assurance Newsletter

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Volume I No. II

## The BQA Difference

If you are one of the thousands of cow-calf producers in Nebraska, you are probably gearing up for a very busy time of the year – calving. You’ve probably got your facilities in check, lined up supplies that might be needed, and moved the cattle to a more accessible location. The to do list can be long and the anticipation runs high as you prepare for this time of year, when your cowherd will provide you with next year’s cash flow. It’s a very critical and important time for cow-calf producers and also one that results in long hours and long days ahead.

This is a key time of year to start the record keeping process on your cattle. The group of calves that is about to hit the ground are your marketing tool – come the fall of the year. The more complete and comprehensive set of records you have available will assist you in marketing those offspring. Much of the record keeping portion of the Beef Quality Assurance program focuses on animal treatment/health records, processing records, feed records and chemical records.

However, with the shift in the industry towards more documentation on each and every animal harvested and sold, starting the record keeping process at birth is a good endeavor.



Knowing the age of calves within your calf crop will assist in determining marketability age come processing time or tracking that animal to its birth parents.

It is also becoming apparent that today’s consumer is seeking more and more information about the products they will purchase for their family and documentation can answer questions they may have.

Take this opportunity to ready your record keeping supplies. If you are not a BQA certified producer, take the time to get certified and open doors to new marketing opportunities today. ■

## Record Keeping

Record keeping, either computer or hand-generated, is a critically important management tool. To ensure consumer confidence and maintain market share, beef producers must be able to document the safety and quality of their product.

## Places to Be

Feb. 2-5, NCBA Convention, San Antonio, TX

Feb. 15-20 - Nebraska Cattlemen’s Classic, Kearney, NE

Feb. 15 - UNL Feedlot Roundtable, Grand Island, NE

June 2-3 - NC Mid-Year Convention, North Platte, NE

### What’s Inside:

Industry Profile - Hansen-Wulf, Inc. ....	2
Industry News - Medication Practices .....	4
BQA Trainer Tips .....	6
Straight From the BQA Manual .....	6
Product Safety Use Guide .....	7
Question From the Field .....	8



# Industry Profile

## MANAGE WHAT YOU MEASURE *HANSEN-WULF, INC.*

As the saying goes, “You can’t manage what you don’t measure,” and Red Cloud, Neb., cow-calf producer Brad Wulf knows this well. Wulf never believed that implementing a record keeping system for the management of the cow herd would make the difference that it has. “We implemented the system 10 years ago, and I wish we would have done it 10 years earlier,” Wulf says. “We have learned so much more about our cow herd and have been able to advance it further than we ever expected.”

Wulf along with his cousin and partner, Dennis Hansen joined the family partnership when they returned from college at the University of Nebraska. Both studied agriculture and returned to expand the cow-calf business that their parents had established in the 1950s. Today the operation consists of more than 600-head of Angus influenced brood cows. Corn, soybeans and alfalfa are also produced. Although they divide up some of the daily responsibilities, Brad and Dennis have integrated the partnership and work as a team to accomplish their goals.

Local BQA trainer, Dr. Dave Rethorst of South Central Herd Health Services, Red Cloud, Neb., introduced Wulf to Beef Quality Assurance (BQA). Rethorst hosted a BQA training which Wulf attended and since then the two have been working together to emphasize and incorporate BQA guidelines into the program.

“You can’t go wrong with BQA,” Rethorst says. “It is practical common sense guidelines to better your herd and product in the end.”

Wulf agrees with Rethorst and also emphasizes that BQA adds value to animals marketed, and added value and return is what producers need to remain profitable.

Each year, the Hansen-Wulf program keeps a percentage of replacement females and the remainder of the offspring produced is sold through a marketing alliance called Power Genetics.

Understanding the importance of documenting records in the BQA program and working with the Power Genetics program that offers additional data tracking the Hansen-Wulf program has come full circle. In their original commercial herd,



(L to R) Brad Wulf of Hansen-Wulf, Inc., Red Cloud, Neb. and veterinarian Dr. Dave Rethorst implement the BQA practices.

“You can’t go wrong with BQA.  
It is practical common sense  
guidelines to better your herd  
and product in the end.”

...Dr. Dave Rethorst  
South Central Herd Health Services



The EID electronic ear tag allows producers to track and record animal treatments and origin.

they did not tag the animals, thus had no form of record keeping available. However, through computerized cow-calf record systems, with just the push of a button they can learn all they want to know about any animal.

As part of this transition, they started using Electronic Identification (EID) tags. All cows are now tagged with an EID tag along with a ranch tag. Their calves are tagged with a ranch tag that matches the cow and then in the fall of the year, the calves get an EID tag.

Wulf explains, that in the beginning, things didn’t go as smooth as they wanted. In the early stages one person was expected to be the record keeper - collect data, run the chute and do other tasks involved. This resulted in mistakes. “However, once we incorporated the EID tag system, we eliminated many of the problems,” says Wulf. “Our books cleaned up, and we had more solid records.”

Of the team, Hansen takes the lead roll in managing and inputting the data. All data is downloaded at the chute when the wand reads the EID tag and then new data is input at that time as well. The keypad scale head is then synchronized with Hansen’s computer and all the data goes directly into an Excel spreadsheet.

At the conclusion of processing, Hansen then forwards the data directly to Dr. Rethorst’s clinic allowing for more follow-up and herd health planning.

## HANSEN-WULF, INC. (CONT.)

"I've seen the improvements that record keeping has provided to the Hansen-Wulf herd, and would encourage producers to take a look at the options available in the industry," Rethorst says. "Just the ability to track herd health parameters with solid treatment records, will pay off in the end." Treatment record history indicates withdrawal time of product, number of treatments per animal and product use. All valuable information to track.

Over the years, the Hansen-Wulf program has expanded their record keeping program from just calving data and herd health to full scale individual animal tracking. They are now able to track animals fed out in their feedyard through processing and receive individual data back on those cattle. "This helps with our sire selection," Wulf says. "Our goal is to produce replacement females that will carry strong carcass characteristics onto their offspring."

Wulf suggests that producers find a direction or program to participate in. "There are a number of record keeping systems, branded beef programs or marketing alliances out there, and you just need to find one that fits with your program." ■



*Electronic identification systems (EID) provide the basis for automated data collection on individual animals.*



*The Hansen-Wulf partnership retains ownership and identifies all of their animals from birth through harvest as well as those re-entering the herd.*

### Practices Emphasized by BQA Trainer Dave Rethorst

- ◆ Proper cattle handling
- ◆ Record keeping
- ◆ Biosecurity
- ◆ Proper injection site location
- ◆ Valid veterinarian client patient relationships
- ◆ Minimize extra label drug use

## A NOTE FROM NEBRASKA BEEF COUNCIL ...A BQA PARTNER

The Nebraska Beef Council has some valuable partnerships in the industry. Nebraska Cattlemen's BQA program with its focus on safety, wholesomeness and quality of beef makes a great partner with the beef checkoff. By following BQA guidelines, producers can avoid carcass defects which decrease customer satisfaction with beef products.

Beef 706 is another collaborative effort with NC and the University of Nebraska. This workshop, funded with beef checkoff dollars, helps producers comprehend the challenges of targeting carcass quality and consistency.

Additionally, BQA became the initial cornerstone of Nebraska's branded beef program – Nebraska Corn-Fed Beef®. Producers' checkoff dollars helped to launch this program and provide point-of-sale materials.

*Congratulations to Lynn Gordon and members of the Nebraska Cattlemen Technical Advisory Committee on the premier edition of the Nebraska Beef Quality Assurance (BQA) newsletter 'The Right Direction'!*



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and*

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***This newsletter is funded in part by the Nebraska Beef Checkoff.***

## MEDICATING (DART) GUNS AND BEEF QUALITY ASSURANCE

### **Injection site damage, past and present**

Preventing, Reducing, Controlling or Eliminating (PRCE) injection site damage in beef has been one of the focus areas of the National Beef Quality Assurance (BQA) program since 1991. The national initiative decreased injection site lesions in the top butt and round from 23% to less than 2% in its first decade.

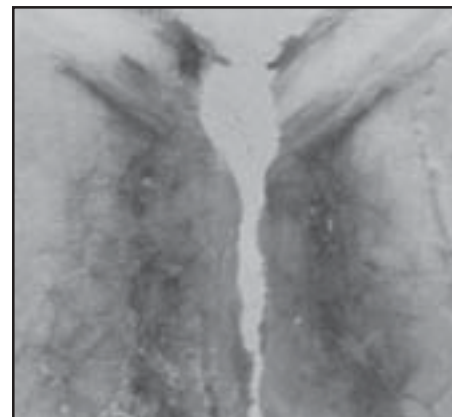
### **The national injection site damage prevention program bottom line.**

The national injection site damage prevention program was very simple... "Get the needle out of the meat." With the aid of cattlemen affiliates, USDA branches that approve vaccines, the extension service, veterinarians and our vaccine and medication suppliers the industry was able to move all injections ahead of the slope of the shoulder and most of our injectables are approved to be given subcutaneously

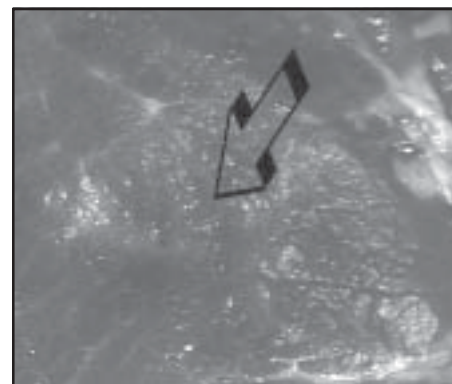
(SQ). The progress continues to be phenomenal. Today we have vaccines and antibiotics that can be given in the ear. . . completely bypassing the potential to damage edible tissue.

### **Dart guns and ballistic systems can be acceptable.**

Dart guns or similar medicating guns such as the Cap-Chur or Solid Tech Ballistic systems are capable of delivering those medications and vaccines that are approved for use either intramuscularly (IM) or SQ ahead of the slope of the shoulder. It must be assumed medication delivered via a dart could be deposited IM. Therefore all darts must limit the dose to 10 cc to fall within the national BQA guidelines. Photographs comparing ballistic delivery versus standard IM delivery of 10 cc of the same medication suggest more tissue damage with the ballistic system. These photos would seem



*Damaged tissue from use of Ballistic system*



*Minimal tissue damage from Standard 10 cc IM injection*

## Food Safety and Beef Cattle Production

It used to be if cattle producers thought about pathogens it was about how to control the agents that made their cattle sick. Today the issues confronting cattle producers are more often about assuring consumers about the quality and safety of beef. Consumers wonder if their health might be affected by the way livestock are raised. Because of Beef Quality Assurance programs, many concerns about physical and chemical hazards originating on the farm have been addressed successfully. Now concerns are increasingly about biological hazards, such as bovine spongiform encephalopathy (BSE), antibiotic resistance, multi-drug resistant *Salmonella*, *Escherichia coli* O157:H7 or other food safety pathogens.

For their part, cattle producers certainly do not wish to produce a product that may endanger human health. Although there are additional costs to assuring a safe and secure food supply, the cost of failing to do so may be far greater. Estimates indicate *E. coli* O157:H7 has already cost the beef industry \$2.7 billion in the past 10 years, including \$1.6 billion in lost demand for beef.

For a long time many in livestock agriculture have believed that food safety concerns should be solved in the kitchen. They argued proper food preparation would largely eliminate dangerous

exposures to many food-borne pathogens. Unfortunately, rather than accept the risk, consumers may choose not to consume products they don't trust. The fact is, the responsibility for food safety belongs to everyone. Many believe the best approach for food safety is the concept of multiple hurdles. In this approach interventions to reduce the probability of food being contaminated with pathogens are taken wherever in the food system they might be effective, including during live animal production.

Our understanding of food safety pathogens in fed cattle has increased tremendously in recent years. We know that organisms like *E. coli* O157:H7 and *Salmonella* are common to cattle, although the nature of their occurrence is quite dynamic. Up to now there has been little that cattle producers could do about these organisms. However, research from the University of Nebraska and other places may soon offer effective ways to control these agents in live cattle.

Nebraska cattle producers can take pride in their leadership in BQA but, there is more to do. Food quality, safety, and security issues have never been more important to animal production agriculture. ■

*David R. Smith, Extension Dairy/Beef Veterinarian, University of Nebraska*

to make it difficult to defend a ballistic system as stress reducing. It would seem reasonable for a ballistic system to increase the likelihood of dragging hair and debris into the site increasing the chances of an injection blemish or abscess.

### **The rear leg (Round) cannot be the target!**

The rear leg or round is frequently presented as a darting target site. This is not acceptable and violates national BQA guidelines. After reviewing all available data regarding these medication and vaccine delivery systems the national BQA advisory group, which includes producers, animal scientists, meat scientists, veterinarians and packers, rejected their use for the delivery of any product behind the slope of the shoulder. It is absolutely imperative the ballistic or any other system not to be used to deliver injectables behind the slope of the shoulder. ■

*submitted by Nebraska Cattlemen Technical Advisory Committee*

## CATTLE PRODUCT SAFETY USE GUIDE

When administering vaccines, medications and other animal health products during processing or treatments, safety is of utmost importance. The following chart outlines the product risk and safety actions you should be familiar with when working with animal health products.

Product	Risk	Safety Action if Exposed
<b>Vaccines</b>		
Modified Live Virus (MLV)	Minimal	<ul style="list-style-type: none"> <li>◆ Wash and treat exposed area with a topical antibacterial ointment.</li> <li>◆ See a doctor if swelling or pain develops.</li> </ul>
Modified Live Bacterial (MLB)	Has potential to cause disease in humans.	<ul style="list-style-type: none"> <li>◆ See a doctor immediately and take the label/bottle with you.</li> <li>◆ Wash &amp; treat exposed area.</li> </ul>
Killed Virus/Bacteria	Minimal	<ul style="list-style-type: none"> <li>◆ Wash and treat exposed area with topical antibacterial ointment.</li> <li>◆ See a doctor if swelling or pain develops.</li> </ul>
<b>Medications</b>		
Injectable/Oral	Minimal Potential allergic response.	<ul style="list-style-type: none"> <li>◆ Take precautions if person has known allergies to one or more antibiotics.</li> <li>◆ Wash and treat exposed area with a topical antibacterial ointment. See doctor if swelling or pain occurs.</li> </ul>
Exception: Micotil	Dangerous - If injected will likely cause death in humans.	<ul style="list-style-type: none"> <li>◆ Apply ice to injection site.</li> <li>◆ Call 911 and take label to ER immediately.</li> <li>◆ <b>Must</b> call Rocky Mountain Poison Control 1-800-722-0987 or Lilly Emergency Hotline 317-276-2000.</li> </ul>
Exception: Lutalyse and other prostaglandins	Dangerous - to pregnant women as they can/will abort or go into labor if exposed. Potential allergic response.	<ul style="list-style-type: none"> <li>◆ Pregnant women should not handle or be exposed to any prostaglandin.</li> </ul>
Exception: Dexamethasone	Dangerous - to pregnant women	<ul style="list-style-type: none"> <li>◆ Pregnant women should not handle or be exposed to this medication.</li> </ul>
<b>Antiparasitics</b>		
Injectable	Minimal	<ul style="list-style-type: none"> <li>◆ See a doctor if an allergic-like response develops.</li> <li>◆ Wash exposed area and contaminated clothing.</li> </ul>
Pour-On/topical/oral	Minimal	<ul style="list-style-type: none"> <li>◆ See a doctor if an allergic-like response develops.</li> <li>◆ Wash exposed area and contaminated clothing.</li> </ul>
Exception: Organophosphates	Potentially Dangerous	<ul style="list-style-type: none"> <li>◆ If handled improperly they can be dangerous.</li> <li>◆ See a doctor if an allergic-like response develops.</li> <li>◆ Wash exposed area and contaminated clothing.</li> </ul>

# Let BQA Become The Right Direction

## BQA Trainer Tips

...By Kevan Albertson, DVM, Stockman's Veterinary Clinic, North Platte, NE

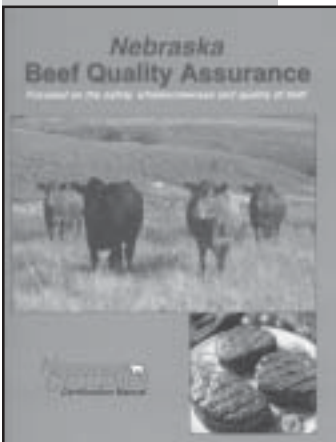
The primary objective of the beef quality assurance (BQA) program is to provide the consumer with a wholesome, high quality and competitively priced product. The success of the program will be determined not only by consumer confidence but also by the profits/returns that are generated by the beef cattle producer.

Beef producers can utilize tools such as biosecurity to compliment the BQA program. Biosecurity involves not only protecting our nation's beef supply from introduction of foreign animal disease (accidental thru live animals or formites and intentional thru bioterrorism) but also preventing disease transmission between beef herds and controlling infectious agents that may be circulating within herds.

Producers and their veterinarians can utilize three basic biosecurity principles to cost-effectively control the spread of disease causing organisms within and between beef herds including:

- 1) Increasing cowherd resistance by implementing quality vaccination and nutrition program.
- 2) Preventing effective contact by maintaining low animal density and decreasing contact time.
- 3) Testing and removing infectious organisms from the herd and preventing entry into the herd.

The beef cattle industry has an opportunity to increase consumer demand by implementing BQA and biosecurity plans to ensure that the nation's beef supply is safe and of superior quality. ■



*(Each issue of "The Right Direction" will feature a section directly from the current Nebraska Cattlemen Beef Quality Assurance Manual to refresh your memory of some of the key guidelines).*

## Straight From the BQA Manual

### QUALITY CONTROL: MAINTAINING QUALITY FEEDS

It is essential to monitor feed sources to prevent chemical residues and ensure high quality feeds. Operations purchasing outside feeds should set up a sampling program to test for quality standards in feedstuffs. Most good suppliers have a quality control testing program of their own.

Products such as pesticides and chemicals, used on raised feeds must be FDA/USDA/EPA approved.

As required by the federal Worker Production Standard, proper training for pesticide handling should be available to all who work with these products.

#### **Handling Feedstuffs:**

1. Maintain a quality control program for incoming feed ingredients.
2. Store feed in a manner to prevent the development of molds and mycotoxins and exposure to chemicals.
3. Build feed handling facilities that reduce the risk of feed contamination.
4. Store all chemicals (pesticides, lubricants, solvents) away from feed supplies. Follow manufacturer's directions for use and disposal.
5. Prior to usage, submit for analysis to a qualified laboratory any feed ingredient suspected of contamination.
6. Feeding equipment that is used for other purposes (e.g. pen cleaning) must be thoroughly cleaned prior to re-handling feed.
7. When possible protect feedstuffs, feed troughs, and water supplies from contamination. ■

*(Page 10)*

## The FDA Feed Ban and BSE Firewalls

The United States Department of Agriculture (USDA) began implementing firewalls in 1989 to fight against the influence of bovine spongiform encephalopathy (BSE) in this country. USDA started the development of a surveillance program in 1990 and a surveillance program continues today.

On Aug. 4, 1997, the Food and Drug Administration (FDA) adopted the "Ruminant Protein Feed Ban", now called "BSE Feed Rule" to prevent the establishment of BSE in the U.S. through feed consumption.

The regulation prohibits the use of protein derived from mammals in ruminant animal feed such as:

- ◆ Meat and Bone meal.

Exceptions to the rule include:

- ◆ blood and blood by-products
- ◆ gelatin
- ◆ pure porcine or pure equine protein
- ◆ inspected meat products (plate waste)
- ◆ milk products
- ◆ tallow.

The recent case of BSE in the U.S., discovered on Dec. 23, 2003, has resulted in further study of ruminant feed products and BSE firewalls. However, at this time no changes have been made to the initial Aug. 7, 1997 ban.

On Jan. 12, 2004, USDA added several additional firewalls to assist in the control process of BSE.

Refer to the chart on pg. 7 for complete outline of proposed BSE Feed Rules and new BSE Firewalls. ■

## Ensuring High Quality Feeds is Essential

## In Effect Food and Drug Administration Supervision

August 7, 1997

### FDA Ruminant Protein Feed Ban

*Prohibits the use of protein derived from Mammals in ruminant animal feed.*

#### Prohibited Products:

- Meat and Bone Meal

#### Exceptions:

- Blood and Blood by-products
- Gelatin
- Pure porcine or pure equine protein
- Inspected meat products (plate waste)
- Milk Products
- Tallow

In Effect

### July 14, 2004: Interim Final Rule

- Prohibits the use of high-risk, cattle-derived materials that could carry the BSE agent in human food and cosmetics.
- Prohibits the use of material from non-ambulatory cattle, the small intestine of all cattle, material not inspected and passed for human consumption and mechanically separated beef from use in human food and cosmetics. Tallow meeting OIE Standards is acceptable.

Proposed

January 26, 2004

FDA announced changes to feed ban that led to the ANPR below.

July 9, 2004

### Advance Notice of Proposed Rulemaking (ANPR) asked for comment on:

- Removing SRMs from all animal feed, including pet food.
- Minimizing the possibility of cross-contamination of ruminant and non-ruminant animal feed by requiring equipment, facilities or production lines to be dedicated to non-ruminant animal feeds if they use protein that is prohibited in ruminant feed.
- Prohibiting the use of all mammalian and poultry protein in ruminant feed to prevent cross-contamination.
- Prohibiting the use of materials from non-ambulatory disabled cattle and dead stock in all animal feed.
- Banning the use of poultry litter as a ruminant feed ingredient.
- Prohibiting mammalian blood and blood products in ruminant feed.
- Prohibiting the use of plate waste in ruminant feed.

#### Key definitions in the rulemaking process:

**ANPR** - A request for information from the public prior to drafting rules. May be followed by an interim or final rule.

**Interim Final Rule** - Effective upon publication. Usually followed by a final rule, but may already be in effect with the interim rule status.

In Effect

### Initial Firewalls

- ❖ 1989 – USDA/APHIS bans the importation of ruminant animals from countries with confirmed cases of BSE.
- ❖ 1990 – USDA begins a surveillance program for BSE.
- ❖ 1991 - USDA/APHIS enacts formal import regulations for countries with confirmed BSE cases.
- ❖ 1993 – USDA/APHIS expands current BSE surveillance program with updates and testing method improvements along the way.
- ❖ 1997 – The FDA enacted a feed regulation to ban the feeding of ruminant-derived protein to ruminants.

### Jan. 12, 2004 – ADDITIONAL Firewalls

- (Oversight of these new firewalls conducted by USDA)
- ❖ Meat from downer (non-ambulatory) cattle is no longer permitted in human food.
  - ❖ Product from cattle tested for BSE must be held until tests confirm that the cattle were BSE free.
  - ❖ SRMs are not allowed to enter food supply. (see SRM definition below).
  - ❖ Material that could carry BSE infectivity can not be used in the process called "Advanced Meat Recovery."
  - ❖ Air-injection stunning, a process used in slaughter plants, is no longer allowed.
  - ❖ Mechanically separated beef is not allowed in human food.

#### Specified Risk Materials (SRMs):

include skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord and dorsal root ganglia of cattle over 30 months of age and the small intestine of cattle of all ages.

## Question From the Field

### Have there been any recent changes in the BQA guidelines?

The Nebraska Cattlemen BQA (NC-BQA) program is reviewed on a regular basis by the technical advisory committee which is a sub-committee of the associations' Animal Health and Nutrition Committee. If there are national quality assurance or state quality assurance guidelines changes to be made, the committee reviews them and incorporates these changes into the BQA program.

In January 2003, the NC-BQA program released a revised and newly formatted 32 page; full color manual (see cover photo on pg 6) that was

extensively reviewed by the committee. This manual is currently in circulation and has been used in trainings over the past 2 years. It contains the most current NC-BQA guidelines. However, additional resource information is always in development on quality assurance issues to assist with the educational process and implementation of BQA.

The complete current NC-BQA manual can be found at [www.nebraskacattlemen.org](http://www.nebraskacattlemen.org) or can be obtained from your local BQA trainer. ■



*Joclyn White, Valentine studying the meat case in a large metro area grocery store as a participant in the BEEF 808 program, Dec. 1-2. BEEF 808 was hosted by the University of Nebraska, Nebraska Beef Council and Nebraska Cattlemen. It is the follow-up course to BEEF 706 and both programs focus on beef production from the live animal to processing to retail.*

*Members of the Technical Advisory Committee which oversees the NC-BQA program include: (back row l to r) Tim Loy, Broken Bow; Dee Griffin, Clay Center; Misty Williams, Kearney; Scott Reynolds, Chairman, Berwyn; Clint Kesterson, co-chair, Alliance; Mike Slattery, Indianola. (front row, l to r): Dave Hamilton, Thedford; Brett Andrews, Burwell; Jim Ramm, Atkinson.*

*Additional committee members are: Brent Plugge, Kearney; Denny Bauer, Ainsworth; Dan Powers, Holdrege; Mike Baker, St. Paul; Kip Lukasiewicz, Ainsworth; Anne Burkholder, Cozad; Rick Funston, North Platte; Rosie Nold, Lincoln and NC staff member B. Lynn Gordon.*



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