

Beef Quality Assurance: Present and Future

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A review of the Beef Quality Assurance Program for the
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Introduction

The purpose of this paper is to review the current status of the check-off funded Beef Quality Assurance (BQA) program in the beef industry of the United States of America, its strengths and weaknesses, and to summarize possible directions it might take in the future. The opinions and positions are those of the author, as influenced by the individuals and organizations interviewed, material and information researched and reviewed, and his personal experiences. It is not an evaluation of past programs. The author has been in the cattle business his entire thirty-one year career, and has participated in all phases of cattle production. He has served the industry in education, the promotion of the beef industry in various membership and leadership capacities including state cattlemen's organizations, two terms on a state beef council, and in national beef organizations.

Methodology

In the preparation of this review, qualitative research techniques were used to gather and interpret information. The five major sources of information were:

1. Personal Interviews
2. Web search for resources, programs, and material
3. Review of materials and programs
4. Records and information from The Cattlemen's Beef Board
5. Comments and opinions gleaned from conversations and meetings

The perspective taken by the author was one of an interested party who had some working knowledge of the program, but did not know the intricate details of the history, or current operational status of the BQA program.

Present Status and Future Direction

General Description

In 2006, BQA is a loose knit coalition of the Cattlemen's Beef Board (CBB), National Cattlemen's Beef Association (NCBA), state beef councils, state cattlemen's organizations, industry partners, state and county Cooperative Extension Service (CES) personnel from across the country, state and federal regulators, and individual veterinarians, cattle feeders, and ranchers. Funding from The Beef Checkoff Program, provided by the Cattlemen's Beef Board and state beef councils, has been the major catalyst for what has evolved into an industry wide program. It is largely an educational program directed toward the production side of the beef industry to improve consumer confidence. Its focus is on the correct use of animal health products, feed additives and supplements, prevention of disease, and the proper care and handling of livestock. Projects and educational activity involving live cattle are authorized by the Act and Order provided the objective of the project is to clearly enhance the quality, safety, and consumer acceptability of beef and beef products. According to NCBA staff, there is currently BQA programming activity in all 50 states and for the production systems of

beef, dairy, and veal. Recommendations from BQA informational material and training fall into the broad categories of record keeping, management, product and animal handling and care, and sampling. There are certification processes available in some states and in some industry segments. There are no verification or audit processes in place relating to BQA practices actually being used by cattlemen in the production of beef. Perhaps the hallmark of the program is the adherence by all participants to the guiding principle that sound science will be the foundation of educational efforts to improve beef cattle production in terms of providing a high quality product to consumers. The topic areas generally covered in BQA training and educational programs are:

1. Feedstuffs & sources
2. Feed additives & medications
3. Animal health treatments & injections
4. Record keeping
5. Animal care and husbandry practices
6. Carcass quality

Scope

Due to its organizational structure, the BQA program has the ability to reach into every corner of the United States beef production system and touch a very high percentage of industry participants. It has evolved over the last twenty-five years from concern about residues to a comprehensive discussion concerning all aspects of beef production across all segments of the industry. The program was formalized in 1991 with the use of dollars from The Beef Checkoff Program. During this long period of time, the focus of the program has appropriately remained the health and well being of the consumer and the responsibility of the producer.

Segments of the industry

1. Beef
2. Dairy
3. Veal
4. Fed
5. Non-fed

The author found it very difficult to actually measure BQA's scope and penetration into all segments of the industry. There are anecdotal reports on the number of trainings, meetings, publications, and certifications, but a centralized reporting system or information database does not exist. Several of the states where BQA is very active can provide estimates, but many states can not. In the interviews conducted, positive results reported in the National Beef Quality Audit-2000 concerning injection site lesions were almost always cited as evidence of the program's activity and success. In the same conversations, serious problems reported in the National Market Cow and Bull Beef Quality Audit-1999 concerning BQA issues were not mentioned. Other measures of activity and scope could be dollars spent on BQA programs and activity or full time employees (FTE) dedicated to the program. However accessing these figures was very difficult. In most states, the program has been institutionalized into the land grant

university system, the state beef councils, or cattlemen's organizations to such a degree that it is impossible to measure the amount of money spent or people dedicated to the effort. Although the author did not contact representatives from every land grant university, everyone that he did mention that BQA was taught in their Beef Production classes in the Animal Science Curriculum. Additionally, many people mentioned that BQA is taught in the curriculums of technical schools, other colleges and universities offering Animal Science courses, 4-H programs, and in vocational agriculture classes in high schools. Again, accurate numbers of trainings, people trained, or certifications in BQA from most states or the nation do not exist. In conversations with representatives of several large ranches, BQA has been incorporated into their employee training and ranch protocol. The feedlot industry has been very active in promoting the program and incorporating its methods and principles. Several interviewees expressed concern about the level of participation within the dairy segment of the beef industry. Additionally, web-based training is available from several states. But it is difficult to accurately determine the total number people trained or certified, within states or segments of the industry.

New efforts in BQA that expand its scope and effectiveness would include making material available in Spanish, additional web based resources, and delivery to a wider range of audiences. These would include people of younger ages, different sizes and types of operations, and to non-traditional audiences like truck drivers.

In summary, judging from conversations and website announcements, the author is under the impression that a great deal of activity concerning BQA goes on each year and is planned for 2006 and beyond. That would be hundreds, perhaps thousands, of meetings and classes across the nation reaching thousands of individuals. However, at this point in time, there is no methodology in place to accurately gauge the actual scope of the program.

Participation

The BQA program is usually delivered by or in collaboration between the following organizations:

1. Cooperative Extension Services
2. State beef councils
3. State or local cattlemen's organizations
4. Veterinarians
5. Sale barns
6. Feedlots
7. Ranches
8. Universities and colleges
9. High School vocational programs
10. 4-H clubs

Traditional target audiences have included:

1. Feedlot owners and workers
2. Ranchers and ranch hands
3. Farmers who own cattle and their workers
4. Owners and employees of dairies
5. Veal operations
6. Students

Future audiences may be expanded to include truck drivers, hobby type owner operators and targeted groups participating in coordinated marketing programs.

Activity

The primary activity of the BQA program centers around general education of people involved in the production processes of beef and beef products. These activities include the publication and distribution of educational materials, hosting meetings and trainings, and in several states, certification and re-certification. There is BQA activity in all fifty states. At any given time, one can find BQA activity going on somewhere. Much of the training centers around times of key production activity, however meetings and trainings are held during all months of the year.

Cost and Expenditures

The Cattlemen's Beef Board annual expenditures on BQA since 2003 are:

<u>Year</u>	<u>BQA Budget</u>	<u>Actual Expenses</u>
2003	\$600,000	\$511,182
2004	\$457,000	\$256,066
2005	\$363,000	\$308,047
2006	\$209,000	\$ 14,160 (as of 4-30-06)

One of the BQA's greatest successes is that to a large extent, its activities have been absorbed and institutionalized into the programs of its participating organizations at the local, state, and national level. No identifiable processes could be identified to accumulate a record of the expenditures made on the program within states, across states, or between or within organizations. As a result, at this point in time there is no way to estimate the total dollars expended on the program for a year, period, state, region, across the nation, or by organization. For example, to my knowledge, there is no way to calculate the total dollars spent on BQA by the CES, or the veterinary profession, or even by state beef councils.

In summary, the total dollars expended on the program are incalculable. This is a problem in terms of industry communication. For example, since there is no way to begin to estimate the total resources expended on the program, it is difficult to communicate to interested parties the importance of the program to the industry.

Standardization

As evidenced by the various educational material and programs that were reviewed and the people interviewed, the guiding principals of BQA and the majority of the educational programs and material are well understood and are very similar. However there are several differences in programs between states. The most pronounced difference is in the single level training that most states have adopted and the two tier training with certification that several states have adopted. In addition, several states and segments of the industry have site plan requirements. At this time there are no required process audits associated with basic BQA training, certification, or site plan development by state or the national BAQ organizations. However, producers of “organic beef” and several “natural beef” programs are required to have verified site plans and are subject to audits.

In the interviews conducted for this review, one of the most discussed issues concerned whether or not value based, differentiated, or niche beef companies would in the future require BQA certification, verification, or audits and if they were instituted who would be the responsible parties. While the majority of producers, and educators felt that, at least to some degree, that this was inevitable, representatives of meat companies felt that supply and demand issues would restrict BQA from rising to these levels.

In order for the industry to meet the BQA mission of consumer confidence, it is the author’s opinion that the industry should adopt rigid standardized terms, definitions, processes, and reporting techniques relating to BQA.

Impact

In conversation, the most widely cited example of the positive impact of BQA programs relates to the decrease in injection site blemishes as reported in the National Fed Beef Quality Audit. But it is the author’s opinion that the most important impact of BQA has been the unexpected outcome of creating an outstanding model of collaboration of diverse and wide spread groups and organizations toward a common goal. It would be impossible to quantify BQA’s contribution toward the dramatic increase in the consumer demand for beef that the industry has enjoyed over the last eight years. However, from interviews and comments, it is clear that due to BQA, industry participants at all levels take ownership of that increase in consumer demand across the industry. That in itself is viewed by this author as a tremendous accomplishment.

In terms of specific impacts on management techniques and procedures outlined in the BQA material and training sessions, it would require an extensive and complex survey to determine if BQA training has actually changed targeted behavior. While there is evidence that some things have changed, there is also evidence that some things have not. For example, industry wide, injection sites have moved from the rump to the neck and injection site blemishes in carcasses have been reduced. However, it would be speculative to say that the frequency of rib brands, or the presence of birdshot in carcasses, for example, have decreased due to BQA training and education.

At this time, there are a limited number of examples of BQA being used to differentiate production processes which is then used to access specific markets.

Strengths/Weaknesses

Examples of the strengths of the program are:

1. Funding for programs and activities from The Beef Checkoff Program have served as an industry catalyst
2. Enthusiasm towards industry priorities has been created
3. Buy-in from all segments is outstanding
4. Quality of training, materials, and general effort is high
5. The program has proven to be dynamic
6. The program is apolitical
7. Support of industry partners is outstanding
8. Institutionalization of principals and programs has occurred
9. The program is a source of innovation in education and beef production

Examples of the weaknesses of the program are:

1. Reporting of activity is very limited
2. Reporting of expenditures is very limited
3. Reporting of FTEs allocated from partner organizations is very limited
4. Standardization of the calculation and reporting of impacts is lacking
5. The organizational structure does not fit the importance of the mission
6. Coordination is good but could be improved
7. Given the importance of the mission, websites relating to BQA are outdated, inadequate, or difficult to access
8. Re-certification is a problem exasperated by the dynamic nature of the program
9. Clear understanding by all involved of what programs fit under the BQA umbrella and which do not.

Some of the program's strengths have actually caused some of its weaknesses. For example, while its organization around a focused objective and core principals is to be commended, its lack of organizational structure and accountability have created a situation where no one really knows what the program cost, what are the cumulative activities or what are clearly identifiable impacts. Those deeply involved in BQA programming activity make an erroneous assumption that their mission, organizational structure, and activities are transparent, easily accessed and well understood by anyone interested in the program. The result of this lack of structure manifests itself in ways that should concern industry leadership. For example, websites related to BQA are generally outdated, hard to find, and confusing without a fairly sophisticated knowledge of the organization of the industry. Also, BQA means different things to people from different segments of the industry. To the Cattlemen's Beef Board, BQA refers to projects funded by monies from The Beef Checkoff Program. To grassroots cattlemen, veterinarians, and educators, BQA means a comprehensive educational program. Many of those involved at the grassroots level do not know, understand, or seem to care about funding sources, requirements of the Act and Order, or other administrative distinctions or requirements. Their attitude is a commendable, spirited and enthusiastic "let's get 'er done." However, it is the author's opinion that the lack of organizational structure will be a serious

problem as the industry works with governments, its partners, and its adversaries on issues like disease, health and safety, and the issues of animal identification, welfare, and husbandry.

A second example of a strength also being a weakness is the dynamic nature of the program. Being dynamic allows for the training to be continually updated and improved as topics and issues emerge. However, re-certification and re-training levels across the country remain very low, and the author received numerous comments from cattlemen that follow-up training was not necessary because they had already been to BQA training. As emerging issues and topics like animal handling and welfare are added to the training, many cattlemen will be left out. In the future, diffusion and adoption levels of past topics, ideas, and concepts will be hard to match.

Unexpected Outcomes

At all levels, the success of BQA projects funded by The Beef Checkoff Program and the effectiveness of BQA educational programming have surprised people with a series of unexpected positive results. Examples are:

1. BQA has served as an excellent example of the positive impact of The Beef Checkoff Program
2. It is a positive role model for educational efforts in the industry
3. It is a positive role model for collaboration and cooperation
4. It has allowed for the dissemination of additional information on other topics

The author believes that these are testament to the outstanding leadership of key individuals. Those would include Dr. Gary Cowman, former Vice President of the National Cattlemen's Beef Association, and the entire Quality Assurance Advisory Board.

Future

While prognostications are difficult, based on past accomplishments and present trends, the following are offered as reasons why the future of the program is both bright and challenged.

The future of BQA will be bright because of:

1. Industry wide and extremely positive feelings towards BQA projects and activities funded by The Beef Checkoff Program
2. Perceived effectiveness
3. Perceived low cost
4. Well understood mission
5. Collaborative spirit of partners
6. Dynamic nature allows adaptability and continues industry relevance
7. Consensus based governance

The future of BQA is challenged because of:

1. A lack of sufficient organizational structure given its size and importance
2. A lack of overall accountability
3. A lack of reporting and accounting processes
4. A failure to adequately document impacts
5. Inadequate staffing, especially at NCBA
6. The reliance of the program on the Cooperative Extension Service and large animal veterinarians as a critical part of the program delivery, given their declining roles in rural America.
7. The dynamic nature of the program makes the issues of re-training and re-certification critical as past participants will not be exposed to current topics.

The consensus of those surveyed was that in the future, the program will remain primarily educational in nature. While discussed, there is little evidence that the program will evolve into one with verification or audit processes that would document BQA practices on ranches. The exception will be when BQA is incorporated into required processes for specific marketing programs.

The author believes that the rewards for participation will remain at the industry level. Even if the cattle market emerges into a two tiered market with cattle either fitting into process verified (which might include BQA certification), the rewards for participation are most likely to be part of the differentiation of the marketplace and will not be funneled directly to individual participants.

In the future, the costs of the program will remain minimal given its importance and how it has become institutionalized in the veterinary profession and the CES. However, the recommendations found in this paper to adequately staff the program, standardize its processes, and to develop a reporting process will require national funding levels typical of several years ago. If these are not achieved, the health, vitality, and effectiveness of the program are threatened. Participants have proven to be willing to pay for some material and training. However, the CBB, NCBA, and state beef councils are encouraged to rededicate funding to the program.

Conclusion

The famous chef, Julia Childs, once unapologetically explained that many of the basic processes that she used in her cooking were critical for success because; "It's just the way you cook!" Due to exceptional leadership at the national, state and local level and across multiple organizations, BQA has risen to meet Julia Child's mantra. For the wide majority of cattlemen, the principals of BQA have become "Just the way you raise cattle!" This is a tremendous accomplishment and many thanks are owed to many hardworking and dedicated people.

With that said, as the old saying challenges; “what’s good for the goose is good for the gander.” If record keeping and accountability are important for cattle producers, then they should also be important components of all levels of BQA programming. This will mean the rededication of resources, change in the organizational structure of the program, continual full staffing, and a renewed industry wide commitment to the fundamental principal of gaining and keeping consumer confidence in beef. It is the strong opinion of the author that if the challenges outlined in this paper are not addressed; the past success of BQA will be extremely difficult to match, concerning issues critical to the future of the beef industry. The best of BQA qualities and characteristics should be used as a foundation to meet the challenges of the dynamic beef industry.

Appendix

People interviewed, visited with, or whose remarks were noted from meetings.

1. Clayton Huseman, KLA, KS
2. Kim McCuiston, TCES, TX
3. Dr. Cody Wright, SDSU, SD
4. Dr. Dan Kniffen, PSU, PA
5. Dr. Dee Griffen, UNL, NE
6. Dr. Ran Smith, Smith Cattle Co., KS
7. Brian Bertelson, USPB, KS
8. Dr. Darryl Strobehn, ISU, IA
9. Dr. Paul Genho, FMC, UT
10. Lisa Pederson, NDSU, ND
11. John Braley, NCBA, CO
12. Renee Lloyd, NCBA, CO
13. Dr. Larry Corah, CAB, KS
14. Dr. Tom Woodward, TX
15. Dr. Craig Payne, MO
16. Clint Richardson, DL&C, FL
17. Wayne Fahsholtz, Country Natural Beef & Padlock Ranch, WY
18. Dee Potter, UM, ME
19. Travis Hoffman, CSU, CO
20. Dr. Billy Robinson, LA
21. Dr. Ron Leminager, Purdue University, IN
22. Dr. Connee Quinn, Elanco, NE
23. Matt Etheredge, King Ranch, TX
24. David Genho, TX
25. Bill Miller, USPB, KS
26. Jerry Yates, WV

**Beef Quality Assurance-Background, Analysis and Recommendations for the
Future**

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“A White Paper Prepared For The Joint Evaluation Advisory Committee”

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Executive Summary

The US Beef Quality Assurance (BQA) Program has been in existence since 1986. It was funded with check-off dollars and managed by the National Cattlemen’s Association in response to concerns about diet-health issues, hormones and potential residues. The BQA Program began to address the issue of injection-site lesions in 1990, and over a 10 period reduced the incidence of injection-site lesions from 21.3% to 2.06%.

Key parts of the BQA Program have been strong national leadership, a prominent and stable BQA Task Force (Advisory Committee), and over 40 state BQA Programs.

There is a concern that the BQA Program has lost “energy and focus”, and there is considerable variation in state programs. This variation is explained by different views of the needs in different states, and variation in sources of money that are funding the state programs.

A significant issue facing the industry is the decline in quality grade of both steers and heifers. This decline may have contributed to erosion of beef demand, and could potentially contribute to further erosion of beef demand.

The following recommendations are offered:

1. Maintain a Beef Quality Assurance Program.
2. Develop a strategic plan for Beef Quality Assurance.
3. Ensure that Beef Quality Assurance has strong leadership at the national level.
4. Continue the Beef Quality Audits
5. Make Beef Quality Assurance market driven.
6. Continue to invest in dairy-beef quality assurance.

Background and Analysis

The purpose of this paper is to provide an evaluation of the U.S. Beef Quality Assurance Program, and to provide recommendations for future direction. The author was asked by the Joint Evaluation Advisory Committee consisting of members of the Cattlemen's Beef Board, and federation and policy divisions of National Cattlemen's Beef Association (NCBA). Check-off funded BQA projects involving live cattle are authorized provided that the objective of the activity is clearly to enhance the quality, safety and consumer acceptability of beef and beef products. The author used a combination of telephone interviews, face-to-face conversations, beef quality assurance materials from a number of states, reports of the beef quality audits and his own personal knowledge and experience to evaluate and make recommendations.

The first beef quality assurance program in the U. S. began in 1986. This program was developed by the National Cattlemen's Association in response to concerns about diet-health issues, hormones and potential residues¹. The National Cattlemen's Association (now the National Cattlemen's Beef Association) Beef Quality Task Force in 1990 began to address concerns raised about lesions resulting from injections of animal health products. An injection-site audit system was put in place to measure the incidence and size of injection-site lesions, and to determine the progress made in reducing the incidence and size². Secondly, research was conducted to better define the causes of injection-site lesions. Injection-site lesions were found to be a result of the injection of animal health products into the muscle of cattle. These lesions were not only the result of injections given near the time of slaughter, but also occurred when the injections were administered over one year prior to slaughter³. The injections resulted not only in visually observed lesions in carcasses, but the injections resulted in decreased tenderness in the area around the detectable lesion⁴. Undesirable flavors were identified in lesioned areas of beef⁵. Injection-site lesion incidence has also been evaluated in beef and dairy cows⁶. Additionally, an education program, using the BQA network, with particular emphasis on shifting location of intramuscular injections from top butt to the neck, was implemented. The progress made from 1991 to 2000 was remarkable. The incidence of injection-site lesions decreased from 21.3% in July of 1991 to 2.06% in July of 2000^{2,5,7}.

There is no doubt that the BQA Program deserves credit for leading the industry to the "near elimination" of a major problem with injection-site lesions/damage in the top butt of cattle. The combination of audits that measured the incidence and magnitude of the problem, research to further define the problem and its causes, and education that was broadly delivered by the BQA Program network including NCA and NCBA staff, state BQA coordinators, extension personnel, veterinarians and allied industry resulted in this progress. This is a stellar example of the effective use of the principles of Total Quality Management.

While progress on the injection-site issue has been impressive, the loss of this issue as a "rallying point" for BQA has caused some reduction in energy and focus for the program. Injection-site lesions were an easily communicated problem, and with effective visual communication, producers could see the need to change practices.

Today, the BQA Program has national leadership at NCBA, and the BQA network includes active programs in over 40 states. The program is largely focused on beef quality defined as “safety, wholesomeness and quality of beef”. This model has been in place for several years. The periodic Beef Quality Audits provide much of the information used in the educational effort that is primarily carried out in state programs. The mission statement of the BQA Program is “to maximize consumer confidence in and acceptance of beef by focusing the industry’s attention on beef quality assurance through the use of science, research and educational initiatives”. The national BQA guidelines address five topics: 1) feedstuffs; 2) feed additives and medications; 3) processing/treatment and records; 4) injectable animal health products; and 5) care and husbandry practices⁸. Also included in the Beef Quality Assurance Program website are guidelines covering Quality Assurance: Herd Health Plan, a Producer’s Guide for Judicious Use of Antimicrobials in Cattle, and Recommendations for Care and Handling of Beef Cattle⁸

The BQA Program has had a BQA Task Force, now called the Beef Quality Assurance Advisory Committee since inception. This Committee has several members with many years of service. The Advisory Committee has guided that development and implementation of the BQA Program. The fact that many individuals have long service with this group has contributed to stability and continuity for the program. State Coordinators for BQA are in general extension personnel or staff at state cattle associations or beef councils.

There is considerable amount of variation in programs at the state level. In fact, there is criticism by some that there is too much variation in the programs at the state level. Critics express the concern that if too many topics or subjects that are distantly related to beef quality get lumped under the BQA umbrella, the program loses focus, becomes diluted, and over time loses its value. Others argue that states are different, and need flexibility to meet the needs of their state. Currently, BQA Programs exist in over 40 states⁹.

The state of Montana has a Bovine Virus Diarrhea-Persistent Infection (BVD-PI) screening project as part of their Beef Quality Assurance Program. The project is designed to: 1) gauge the prevalence of BVD-PI in the state; 2) demonstrate innovative screening/diagnostic techniques; and 3) investigate the economics of BVD-PI elimination on a herd-by-herd basis. The components of the program are education, diagnosis, biosecurity and benefits¹⁰. This program is funded with federal congressionally directed (earmark) funds¹¹.

The South Dakota Beef Quality Assurance/Critical Management Plan is quite different from most states¹². The objectives of the South Dakota program are:

1. To assure due diligence and best methods of production for food safety are practiced by participating beef producers.
2. To provide a model minimum uniform educational requirements to be completed by participating producers.

3. To provide a model minimum uniform critical management plan to be adopted by participants.
4. To provide a model uniform national system for certification of beef producers in states participating in, and adhering to, these guidelines and minimum standards.
5. To provide a model uniform national certification system recognized by producers, state and national regulatory authorities, packers and producers, distributors and retailers, and consumers.

The South Dakota Beef Quality Assurance/Critical Management Program appears to have more emphasis on the food safety aspect of quality assurance. Perhaps this is because the program has been in part funded by USDA-FSIS.

Most state programs do appear to focus their educational efforts on the topics of the national BQA guidelines. Beef Quality Assurance certification is focus of nearly every state program. There are over 65,000 producers currently certified in Beef Quality Assurance¹³. In some states, there has been considerable emphasis on value-added calf programs, and in others, on the proposed National Animal Identification System. While animal identification and record keeping are important parts of Beef Quality Assurance Programs, the National Animal Identification System (NAIS) is not. The objective of NAIS is to provide 48-hour traceback of animals for the purpose of disease control and eradication. “Lumping” NAIS into beef quality assurance creates confusion and puts Beef Quality Assurance programs at risk. NAIS is funded by USDA-APHIS, not beef checkoff dollars.

While funds from the Beef Checkoff Program support the effort at the national level, there are many sources of funds at the state level. Most states have at least some funds from their state beef councils. In many states, cooperative extension is funding the salaries of many of the people conducting the state programs. Other sources of funds for individuals conducting BQA programs include state beef councils, USDA-FSIS, USDA-APHIS, federal earmarks, “tobacco” money, and private industry. It appears that the variation in state programs is at least in part due to the various sources of money. If one looks at the total dollars invested in Beef Quality Assurance, it is likely that funds from the Beef Checkoff Program provide less than 20% of the total.

A number of years ago, dairy-beef became an area of emphasis of BQA. There continues to be a need in the dairy-beef area, especially since most violative residues of animal health products occur in dairy cattle¹⁴.

The beef industry has changed a great deal since the first Beef Quality Assurance program was developed. Do changes in the industry change the information needs, or the structure most capable of serving the beef industry?

While Beef Quality Assurance has always been defined more broadly than quality grade, USDA quality grades are certainly one measure of beef quality.

There are currently 43 USDA Certified Beef Programs. These programs have specifications for live animal requirements including phenotype and genotype, quality factors, yield factors and carcass characteristics¹⁵. Certified Angus Beef is by far the largest of these programs. In excess of 500 million pounds has been sold under the Certified Angus Beef brand for each of the last seven years¹⁶. While Certified Angus Beef has grown significantly and the percentage of cattle that are black has increased, quality grade has not increased. The 2005 National Beef Quality Audit adjusted the data for the percentage of cattle graded, and reported that the percentage prime has declined 1% and the percentage choice has declined 6.2% from 1975 to 2005¹⁷. Perhaps more significantly, a paper recently published by Corah and McCully (2006)¹⁸ indicates that the recent decline in percentage of cattle grading choice has been significant. These authors report information from the VetLife Benchmark Performance Program indicating that the percentage of heifers grading choice has declined from just over 58% in 1999 to less than 54% in 2005. Likewise, the percentage of steers grading choice has declined from about 48% to about 44% during the same time period. This database represents over 10 million head and is the best industry database for evaluating this trend. The decline in quality grade is a huge problem in the industry, and ***requires immediate attention.***

Another change is the growth in the amount of beef sold under a brand. In 1986, only a small amount of U.S. beef was sold under a brand. In 2004, approximately 42% of retail beef was sold under a supplier or store brand. There is little doubt that the growth in branded beef has contributed to increased “quality” of product delivered to the consumer, and ideally, quality is best defined at the consumer level. Branded beef growth and the supply systems that provide the product for brands should drive the “quality” message throughout the supply chain. This is especially true for brands that reach all the way to the cow-calf sector of the industry to satisfy their animal and product specifications.

Good examples of these brands are the natural “never-ever” brands, which are by definition, source verified. These are branded beef programs that do not allow the use of either antibiotics or growth-promoting implants. The Beef Export Verification Program¹⁹ and associated Quality System Assessment Programs hold potential for driving “quality” through the supply chain. There is no doubt that *Market Driven* opportunities to improve “quality” work, and should be facilitated and exploited.

While this industry has changed in the last 15 years, it is still largely a segmented industry. While brands have grown significantly, only a small portion of the cow-calf sector is directly connected to a brand that drives decision making at the ranch level.

Recommendations

1. Maintain a Beef Quality Assurance program.

The US beef industry should have a Beef Quality Assurance Program that is focused on continually improving the products that the industry produces and the processes that it uses.

2. Develop a strategic plan for Beef Quality Assurance for the US beef industry.

It appears that this is a good time for the development of a strategic plan for Beef Quality Assurance. This plan should be an important component of the beef industry long-range plan. The planning process should include input from key stakeholders including Cattlemen's Beef Board, National Cattlemen's Beef Association, Beef Quality Assurance Advisory Board and state Beef Quality Assurance coordinators. I recommend a thorough evaluation of the current mission statement.... "to maximize consumer confidence in and acceptance of beef by focusing the industry's attention on beef quality assurance through the use of science, research and educational initiatives". The mission statement and goals should delineate the scope and reach of the program. Central to the plan is a clearly stated definition of beef quality. The plan must also include measurable, well-defined goals. It should be understood that the purpose is not only to develop a clear plan for Beef Quality Assurance, but to attain broad support for the plan.

3. Ensure that the Beef Quality Assurance has strong leadership at the national level.

It is doubtful that a good plan can be successfully developed or implemented without strong national leadership at the NCBA level. I encourage the organization to ensure that the leadership is in place.

4. Continue the Beef Quality Audits.

While the objectives of the Beef Quality Audits may change with changes in the industry, the need to measure parameters that affect beef quality, and to benchmark industry progress does not change. I would recommend that the audits quantitatively examine not only changes that occur in the product(s), but measure changes in the industry that affect beef quality, including live animal factors.

5. Make Beef Quality Assurance (or components of BQA) market driven.

Let me concede that this is much easier said than done. However, there is no doubt that progress towards any significant objective will occur more rapidly when driven by the market place. This is historically difficult in a highly segmented business, where market signals are cloudy.

6. Continue to Invest in Dairy-Beef Quality Assurance.

Dairy-Beef should remain an important area of emphasis for the Quality Assurance, particularly because of the risk of violative residues in this group.

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Review of BQA “White Papers”
Paul Genho, Ph. D.
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At the request of the Joint Evaluation Advisory Committee, I have reviewed the papers of Dr. Ken Odde and Dr. Barry Dunn dealing with the checkoff-funded Beef Quality Assurance program. **The methodology used in evaluating these papers was to 1) review the methodology used by the authors in developing these papers 2) identify commonality in their observations and recommendations and 3) test these recommendation against the thoughts of a small group of industry leaders. Finally some limited additional recommendations gleaned from those to who I talked will be proffered.**

It needs to be stated up front that these gentlemen were excellent choices to evaluate the effectiveness of the BQA program. Dr. Odde’s training and experience as a veterinarian, his experience in the pharmaceutical industry and his role in teaching gives him a unique perspective in performing an evaluation. Similarly, Dr. Dunn’s previous experience as a cattle producer and industry leader coupled with his South Dakota beef cattle extension role and his more recent function in training future ranch managers at the King Ranch Institute of Ranch Management gives him a unique perspective from which to perform an evaluation. I commend the committee on the choice of these two solid thinkers in performing this evaluation.

While these gentlemen have both had considerable exposure to the BQA program and thus had a working knowledge of the program, they each sought input beyond their own expertise. Both Dr. Dunn and Dr. Odde gathered additional knowledge through interviewing others with expertise or opinions, by reviewing the materials and programs from various states, and by reading various reports and records from both National Cattlemen Beef Association (NCBA) and various states. They then consolidated the observations and information gleaned via this process with their own experiences. Given the nature of the review this methodology appears to be the most viable approach to evaluating the program.

Dr. Dunn’s approach was similar to a SWOT analysis and he focused more on the need for increased organization structure, reporting, staffing needs and human dynamic issues. Dr. Odde basically analyzed the achievements against the mission statement and made six specific recommendations for the program in the future. In spite of these different approaches they was considerable commonality in their conclusions.

Both authors gave positive reviews for the BQA accomplishments of the past. Dr Dunn appropriately pointed out the positive effects of collaboration and participation of the diverse players in the cattle industry towards a common goal. BQA has certainly involved many diverse players across the nation, across industry segments and across universities, producers groups and marketing segments. Dr. Odde credits BQA with the “remarkable” significant reduction in injection site blemishes from 21.4% in July 1991 to 2.06% in July 2001. Dr. Dunn concedes that reductions in injection site blemishes have occurred and that in his interviews the reduction of injection site blemishes was widely

cited as an example of the positive effect of BQA; however, he thought it would be speculative to conclude that other producer induced blemishes such as rib brands and bird shot have decreased.

Dr. Dunn discusses the nationwide educational program stating that “there is BQA activity in all fifty states. At any given time, one can find BQA activity going on somewhere”. He also states that one of BQA’s greatest successes is that its activities have been absorbed into the programs of the many participating organizations. Dr. Odde discusses the fact that the educational efforts of the BQA program, including Beef Quality Assurance certification, are the focus of nearly every state. He states that over 65,000 producers are currently certified in Beef Quality Assurance.

Both I and those with whom I discussed this review concur with the authors that the real strength of BQA lies in its ability to educate a large number of producers in a relatively short time.

Both authors point out the diverse nature of the programs from state to state. Dr. Dunn indicates that the primary differences of the program are in the single versus the two tier training approach. Dr. Odde discusses the differences between states in terms of the topics included and notes that critics indicate that too many issues are lumped into the program resulting in a loss of focus. He indicates a concern that while animal ID and record keeping is clearly a part of BQA that the National Animal Identification System (NAIS) is not and that efforts on the part of some to lump BQA with NAIS is inappropriate.

Partially as a result of this state to state diversity, Dr. Odde calls for the development of a strategic plan for BQA including a thorough review of the mission statement. He feels clearly defined measurable goals need to be developed both to give focus but also to assure ongoing wide support. Dr. Dunn feels that rigidly defined reporting, processes and definitions need to be developed and that the organization structure needs to be redefined to meet the importance of the mission.

The group that I discussed these reports with concurred that it is time for a review of the strategies, organization, funding and reporting processes of BQA. Some felt that reliance on past accomplishments and repeated redundancy of existing training materials will not sustain the program into the future. It is the opinion of those who I discussed these reports with that the greatest accomplishments of BQA have and will be in educating producers about some specific tangible process such as proper injection site placement. They feel that as NAIS is fully implemented that educating producers about this program will become critical and that BQA’s educational role will be critical to full implementation. Dr. Odde appropriately points out the issue of the declining US beef quality as measured by the USDA Quality Grade. This is an issue that urgently needs addressing if improvement in beef demand is to continue; however, at present, processes

to improve beef quality grade have not been clearly identified, thus BQA's primary role as an educator of producers across the nation can not presently address this issue.

The group that I discussed these papers with also feel the need for more standardization in the core materials and record keeping as both Dr. Odde and Dr. Dunn call for; however, they feel that states need to have the flexibility to overlay product related local production issues onto the national program. An example that was cited was the fact that liver fluke incidence is increasing and that Gulf coast state's BQA program could appropriately train producers in the impact and management of the liver fluke whereas such training would not be necessary in arid areas.

Both Dr. Odde and Dr. Dunn addressed the perception of inadequate staffing at the NCBA level. Obviously if a quality national program is to exist, quality national leadership, both professional and voluntary, must be in place. Without a clear national strategy for new educational initiatives that will achieve meaningful and measurable improvement in consumer demand for US beef; however, allocating additional amounts of the limited financial resources of the checkoff to the program into the future would be foolish. I would suggest that major efforts in the near term need to be made in defining the strategy for the future. Once this is completed an analysis of expected benefits from the new strategy could be made to determine any future permanent increase in staffing and funding is warranted. No doubt a very valuable network for the dissemination of information exists but to fully utilize this network into the future new strategies need to be developed.