

## **Project: Sustainable Beef: Integrated Total Quality Management for Beef Production**

**Brief Description:** Sustainable beef production requires an integrated system partnership. The Montana Beef Network (MBN) is a partnership between the Montana Stockgrowers Association (MSGA) and Montana State University (MSU). Beef producers document best management practices in raising and marketing age- and source-verified calves for which consumers are seeking and are willing to pay a premium. Specifically, MBN provides beef quality assurance (BQA) certification, implements and documents bio-security plans on ranches, and provides educational outreach on topics such as brucellosis management and cow nutrition. MBN, using a “supply-chain” management approach, is driven by customer requirements for quality assurance by documenting accountability, understanding customer preferences, and educating producers on globalization and the comparative advantages of Montana beef.

**Executive Summary:** The beef industry continues to evolve towards a more consumer-oriented focus with greater emphasis on specific and documented management practices which result in safe and consistent end products. This requires a team effort to deliver educational programs, and develop a USDA-approved data base which documents best management practices such as source- and age-verification of calves for export markets. These same concepts are necessary to help manage brucellosis in the Greater Yellowstone Area. BQA and bio-security, major efforts of MBN, are designed to provide production benchmarks comparing Montana calf production to national quality audits, to reduce common cattle diseases by documenting health and nutritional management, and prevent the introduction and spread of common cattle diseases. MBN will explore other mechanisms to add value to calves by continuing to develop Verified Beef and other risk management approaches. Further, ranch-based programs will emphasize the value of bio-security education, BQA certification, and development of herd health programs.

**Congressional Action Needed:** Appropriation of \$1,000,000 is requested.

**Importance to Montana:** The beef cattle producers of Montana own approximately 1.6 million beef cows. Montana’s beef cattle industry generates approximately \$900 million dollars in annual revenue and accounts for approximately one-half of the state’s total agricultural income. In the future, our ability to market cattle may hinge on source-verified calves from birth until harvest. Implementation of mandatory country of origin labeling (mCOOL) challenges MBN to assist producers in documenting source history of weaned calves and cull cows (1 million head/year). Animal health treatment history, breed, age and weight can be incorporated into subsequent management programs to guarantee safety and wholesomeness, and assure the quality and consistency of end-products. In addition, cowherd data bases need to be developed to track animals, and for insurance programs to prevent catastrophic loss of beef cows because of zoonotic disease (e.g. brucellosis).

### **Contacts at MSU:**

Tom McCoy, Vice President for Research (406) 994-2891

Jeff Jacobsen, Dean and Director, COA/MAES (406) 994-3681

## Sustainable Beef: Integrated Total Quality Management for Beef Production – Talking Points

- The Montana Beef Network is a cooperative partnership between the Montana Stockgrowers Association (MSGGA) and Montana State University (MSU).
- MSU will be responsible for educational and research objectives and MSGGA will be responsible for tracking and tracing animals, and evaluating carcasses.
- The establishment of a data management service company, Verified Beef, by MSGGA is a successful outcome. This approach has resulted in approximately \$12/head (range from \$0 to \$45/head) greater income for producers enrolled in the program. During 2008, approximately 100,000 calves were age- and source-verified through Verified Beef, a 50,000 head increase from 2007.
- Six hands-on, ranch-based BQA programs, and 19 formal programs were designed to develop bio-security plans for the ranch. More than 200,000 calves have been screened for the disease, Bovine Viral Diarrhea (BVD), through a project to determine the incidence of the disease in Montana herds. We will implement defined protocols to remove infected animals from the herd.
- Using extensive circulation via weekly and biweekly newsletters, a semiannual magazine, interactive TV and media contact lists and websites ([www.mtbqa.org](http://www.mtbqa.org); [www.MBN.org](http://www.MBN.org)), producers will receive the most current information involving animal identification, traceability, age- and source-verification, and current management approaches.
- Educational programs will be aimed at meeting Beef Quality Assurance (BQA) standards, production and marketing goals, adding value, and providing additional educational programs.
- Certify feeder calves that have met defined management protocols (BQA, Bovine Viral Diarrhea (BVD), age- and source-verification) to add value (\$9.48/head premium).
- Return feedlot and packing plant performance information to cow-calf producer to compare with industry standards for quality, consistency and red meat yield. Present data indicate 17% of cattle are too fat or do not have enough muscling.
- Work will continue on long-term retention and readability of electronic ear tags in cows. Tag losses accelerate after the third year. Four thousand producer-owned cows are enrolled in this project.
- We have initiated research to identify a genetic marker for improved feed efficiency in beef cows. To date, we have identified cows which have 15% lower yearly feed intake than the average, which could translate into a \$70 increase in the value of the weaned calf.