heifer selection, management and development, management of a herd bull, body condition scores (BCS) of beef cows and their impact on reproduction, estrus synchronization, artificial insemination and new reproductive technologies.

**Herd Health.** Health receives the least attention of any phase of the cow-calf operation. Health practices must be part of the total management of cow-calf operations. In this session, producers will learn to prevent and recognize diseases and parasite problems common to Tennessee. Developing immunity and individual health and management plans for cow-calf operations will also be discussed.

**Cattle Handling and Behavior.** To execute an effective job in the preceding areas, cattle must be handled and worked. This section provides opportunities for producers to develop an understanding of cattle behavior and to incorporate this knowledge to make cattle handling and management safer. The basic components of a cattle-handling facility and ideas for improving existing facilities will be discussed.

**Environmental Concerns for Beef Producers.** Both profitability and sustainability of cow-calf operations require that producers be good stewards of the environment and resources on the farm. Producers will learn management practices to reduce the risk of water pollution, best management practices (BMPs) around heavy-use areas and how to conduct a self-evaluation of their operations.

**Food Safety.** Food safety is the number one concern of consumers. Producers will learn that production of a safe, wholesome beef product starts with cow-calf operations. Beef Quality Assurance (BQA) guidelines and procedures, as well as techniques and practices to help protect the herd from threats of bioterrorism, will also be presented.

**Management of the Beef Herd.** This section will discuss record keeping and evaluation in managing a cow-calf operation. Producers will learn the importance of collecting, organizing and using production and financial records. They will also gain an understanding of the methods/systems available to maintain and evaluate records and increase their ability to calculate and use herd performance measures to evaluate the efficiency of their operations. Producers will improve their ability to calculate accurate production costs for their operations and evaluate opportunities to lower costs.

**What are the benefits of the Master Beef Producer Program?**
- Participation in educational sessions that provide opportunities to gain knowledge in cow-calf production and marketing.
- A reference manual of the topics covered in the sessions.
- Master Beef Producer certificate.
- Master Beef Producer cap.
- Master Beef Producer farm sign.
- Qualify to apply for Tennessee Agricultural Enhancement Program assistance.

**Where can I find out more about the Master Beef Producer Program?**
Information is available from any county office of the University of Tennessee Extension. Or you may contact:

James B. Neel
Professor of Animal Science
The University of Tennessee
2640 Morgan Circle
Knoxville, TN 37996-4575
Phone: (856) 974-7294
E-mail: jneel@utk.edu
http://animalscience.ag.utk.edu/

Partial funding for this program was provided by a grant from the Tennessee Department of Agriculture’s 1M-8/10 (Rev) E12-4412-00-001-11 11-0017

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.

UT Extension provides equal opportunities in programs and employment.
The Master Beef Producer Program is an educational program designed to provide information to Tennessee cow-calf producers to help them be the very best in the country, improve their profitability and position the industry to be competitive with other states.

The Master Beef Producer Program is led by a team of University of Tennessee Extension specialists and agents, with support and involvement of representatives of the Tennessee Department of Agriculture and businesses and organizations that have an interest in the state’s cattle industry.

Master Beef Producer started in 2004 with 311 producers certified in 12 sessions. During 2006–09, 164 sessions were held with 6,152 cattle producers participating. To date, more than 8,000 cattle producers have participated.

**Who can participate in the Master Beef Producer Program?**

Any Tennessee cow-calf producer who is interested in improving his or her knowledge of beef production and marketing is welcome to participate.

**How can I get involved?**

All you need to do is contact your local UT Extension agent for agriculture to inquire about the availability of the program in your county or area.

**How much does it cost?**

A suggested fee of $150 covers the cost of the training sessions, educational manual and other teaching materials, as well as a Master Beef Producer cap and farm sign. Both indicate that the producer has been trained in the Master Beef Producer Program. The Tennessee Department of Agriculture will provide $100 scholarships to producers who are Beef Quality Assurance Certified Producers with a premises ID number.

**What topics will be covered in the educational sessions?**

- **Introduction.** This section will include a description of the Master Beef Producer Program, the objectives and goals, and a brief introduction of the topics.
- **Managing and Planning for Success.** This session provides opportunities to learn that the operation is a business, and that managing and planning are essential. The importance of a mission statement, development of goals and identification of areas that are important to the operation and the family will be discussed. Participants will be taught how to evaluate new concepts and technologies to find the “best fit” for their operation and family goals.
- **Marketing Beef Cattle.** Marketing receives limited planning in most operations. This session will help producers understand the source of demand and prices paid for feeder cattle, factors that add value to feeder cattle as well as those that cause discounts, feeder cattle grades and their purposes in marketing, how the beef cattle cycle affects the profitability of the industry and how to develop a marketing plan for their operation.
- **Developing Genetics to Meet the Needs of the Industry.** The cow-calf industry makes genetic decisions that impact the profit of all remaining sectors of the beef industry, as well as the consumer. Producers will learn genetic principles; use of performance records, to include EPDs, in planning breeding programs; sire selection; selecting and culling of females; and systems of crossbreeding.
- **Carcass Merit.** The value of a beef carcass is influenced by genetic decisions. In this session, producers will learn the quality and yield grades of beef carcasses, the impact of quality and yield grades on the value of carcasses and grid pricing of carcasses.
- **Feeding the Beef Herd.** Providing feed for the cow-calf operation is the largest expense item and has the greatest impact on profitability. Producers will learn the essential nutrients for beef cattle, factors affecting the nutritional needs of beef cows, that forages are the basis for economical feeding programs, interpretation of feed and mineral tags, ration balancing and the role of supplementation and feeds applicable to Tennessee conditions.
- **Forage Production.** The role of beef cattle is to convert forage into a more valuable product – feeder cattle. Producers will learn the basics of forage production, factors affecting quality of forage, the value of controlled grazing, managing forages to fill production gaps and forages that are common to Tennessee.
- **Reproduction in Beef Cattle.** Reproduction is one of the major factors that impact the profitability of a cow-calf operation. Producers will learn the economic importance of reproduction, the function of the female and male reproductive systems, replacement.