



BEEF CATTLE TIME

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Master Beef Producer Program to Get Underway in 2004

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The Master Beef Producer Program will get underway across Tennessee during winter and spring of 2004. This is an educational program designed to provide information to Tennessee beef producers to aid them in becoming “top” cattle producers. The program will also aid in improving profitability and competitiveness of the individual producer as well as the state’s beef industry.

The Master Beef Producer Program was developed by University of Tennessee Extension specialists, College of Veterinary Medicine faculty and Extension agents with input from agribusinesses, marketing, local veterinarians and Tennessee Cattlemen’s Association representatives.

Partial funding for the program is provided by a grant from the Tennessee Department of Agriculture’s Agriculture Development Fund. Proceeds from this fund come from the sale of the Tennessee Ag Tag specialty license plates.

The objective of this program is to provide technical information to the state’s beef producers through educational seminars designed to help them “move to the next level” and be among the best in the nation.

The cattle industry is the number one source of agricultural income in Tennessee, but there are still lots of opportunities for improvement in producing and marketing feeder cattle that will result in increased profitability of cow-calf operations.

The Master Beef Producer Program will consist of 12 educational topics focusing on cow-calf production and issues facing the beef industry. These include Managing and Planning for Success, Marketing, Genetics, Carcass Traits, Feeding the Cow Herd, Forage Production, Reproduction, Herd Health, Cattle Handling and Behavior, Environmental Concerns, Food Safety, and Management of the Cow Herd. A Beef Quality Assurance (BQA) producer certification or recertification session may also be included in the program.

Seventy-seven Agricultural Extension Service agents and personnel recently completed four days of training on the 12 topics and will be leading the programs on the local level.

The producer educational training sessions will be conducted either on a county or area basis. Producers will be encouraged to interact with other producers in their area and share experiences that have resulted in improved production and marketing of feeder cattle.

Producers who go through the program should be better beef producers if they apply the knowledge gained to their operations. Producers completing the program will receive a Master Beef Producer cap, farm sign and certificate of recognition.

A registration fee of \$100 covers the cost of the educational materials and a beef production reference manual, a cap and a farm sign.

The Master Beef Producer Program should be of interest to all Tennessee cow-calf producers. Anyone interested should call a local Agricultural Extension Service office for additional information.

The Master Beef Producer program is the most extensive and intensive educational program planned for the Tennessee cattle industry. It should result in a difference and improvement in the state’s cattle industry.

Identification/Traceability of Beef Cattle Revisited

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Why is animal or cattle identification important? Better cattle managers have been identifying cattle for years for practical management, but in most cases identification was not carried forward to benefit the next owner and ultimately the consumer. In fact, there have been cases in which owners of the calves did not want the source of the calves identified. Nowadays, this reaches far beyond the farm gate to buyers throughout the world.

Identification is important for disease control, tracking disease outbreaks (Canada’s BSE/mad cow), and monitoring threats to bio-security. The ability to quickly

trace disease problems should help reduce the cost of problem solving. Four years ago in Michigan, it took several weeks to trace a TB cow to its original herd. In 2003, it took the Michigan Department of Agriculture less than 15 minutes to do a similar trace-back. An identification system could help get to the source of the problem much quicker.

An identification/trace-back system would also help industry needs such as market access. An identification system would help to maintain export markets and build demand for U.S. beef. A system would help to protect product image, provide trace-back if a problem should occur and give consumers food safety assurance.

Food safety is a priority of consumers and high on their list of criteria for food selection. Consumers are also asking for information on how beef is produced and processed.

Marketing specialists have pointed out that product traceability systems have been implemented for different reasons and at different speeds. The European Union countries have had a public health issue that made cattle traceability a public good resulting in a regulatory requirement. In July 2002, Canada implemented a mandatory cattle identification system driven by the need to enhance export demand for beef as well as to resolve animal disease problems following Great Britain's foot and mouth disease episode. Canada's system did not solve the BSE "mad cow" problem but helped to quickly resolve the problem. In the U.S., traceability is more of a market issue, a private good and a private marketing chain decision. Research found that traceability alone was of less value to consumers than information on either food safety or animal welfare, while in Japan and the United Kingdom traceability had equal value to food safety and animal welfare. The U.K. and Japan have had cases of BSE.

Traceability will become more important in marketing beef to other countries. Currently, we export about 9 percent of our beef. Research indicated that the U.S. received the lowest "score for traceability, transparency and other product assurances compared to Denmark, U.K., Canada, Australia and New Zealand and Japan." Japan is our largest export customer, and cattle must be identified in that country. Traceability using a satisfactory identification system will not prevent or stop a disease or food safety problem, but it should allow quicker detection/tracing to the source. It should also reduce the total cost of tracing the source of the disease or food safety problem by reducing the number of animals that must be tested.

Some producers of agricultural products in England are providing product information to add value to the product. If consumers, retailers, packers, feedlots and others in the beef-marketing channel want more information, why not provide it if it will make beef/cattle more valuable to the buyer. If the cattle have certain value enhancing characteristics, why not tell all potential buyers.

There is a national identification work plan to identify all premises having direct contact with a foreign animal disease within 48 hours after discovery. The goal is

to have a system in place by July 2004. The private sector is offering several technology alternatives for identification, but no one is dealing with some of the larger issues of the problem/opportunity. These include: Will we rush into a mandatory identification system which may not easily allow for the flow of value determining information up and down the system? What information will be privately held and what will be available for public use? Who will pay for the system — producers through higher costs, or consumers through use of tax revenues? What are the product liability issues?

Producers should begin by identifying all cattle and documenting as best they can their origin. It is not necessary to have expensive identification equipment. It is likely that the first point of sale will be where identification becomes a requirement. Auction markets are likely to need equipment for managing large quantities of animal identification data, probably in electronically transmissible form. Yes, it will be a hassle and seems a huge problem at first; however, the consequences of losing demand can be very significant and impact prices negatively, to say nothing of the consequences of a disease outbreak in the United States.

UT Forage Testing Lab 2003 Results Indicate High Variability

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One hundred and seventy-nine forage samples were submitted to the UT Forage Testing Laboratory for analysis from January through August of 2003. These results should be of interest to anyone involved in harvesting, marketing or utilizing forages.

Crude protein and Total Digestible Nutrient (TDN) values of the forages are presented in Table 1. The test results indicate that a tremendous amount of variability exists, with many samples low in protein and TDN (Total Digestible Nutrients) while others were high. This emphasizes the importance of routine forage testing so that efficient feeding practices can be implemented for optimum management and production.

Table 1 presents the nutritive value of the forages on an "as fed" basis. This means that the percentages reflect the nutrient concentration, as the feed is actually fed, uncorrected for moisture.

The extreme variability noted in forages tested in 2003 can have important feeding implications. For example, if producers assumed their hay was similar to that found in standard feed analysis tables (or "book value"), they could be making a serious error. For example, the crude protein book value for fescue hay is 13.3 percent, but the actual tested value was 8.90 percent. The actual average was 33 percent lower than the book value. Does this indicate that the book values are wrong? Book values are averages taken from a number of sources over several years. They have limited value

Table 1. Nutrient Content of Forages Tested in 2003 (As-Fed Basis)

FORAGE TYPE		CRUDE PROTEIN ¹ %	TDN ² %
Fescue Hay (n = 9)	Average	8.9	48.0
	Range	5.1 - 12.8	44.1 - 57.9
	Book Value ³	13.3	54.4
Orchardgrass Hay (n = 12)	Average	8.8	47.9
	Range	5.1 - 13.6	43.1 - 59.9
	Book Value	7.6	51.05
Bermudagrass Hay (n = 21)	Average	11.5	53.6
	Range	7.2 - 15.3	45.5 - 59.9
	Book Value	8.9	41.9
Wheat Hay (n = 6)	Average	8.9	50.3
	Range	6.2 - 12.5	45.9 - 56.7
	Book Value	8.5	54
Alfalfa Hay (n = 9)	Average	15.28	53.39
	Range	10.5 - 16.6	49.3 - 57.1
	Book Value	19.0	57.0

¹ Crude Protein, "As Fed" basis.
² TDN = Total Digestible Nutrients, "As Fed" basis.
³ Book Value from National Research Council Table of Feed Composition, 1985 and 1996.

in predicting true nutritional values of specific forages. This is further proof that actual laboratory analyses are more reliable in developing feeding programs than values from a table. This is also the basis for the Extension Service forage-testing program.

Cattle do not perform as well on poor quality forage, especially if it is improperly supplemented. There are several ways that performance is decreased:

- **Consumption:** Cattle cannot eat enough low-quality hay to meet nutritional needs. In general cows need to consume approximately 2.5 percent of their body weight per day. Lowered digestibility can result in cows being able to consume only 1.5 to 2.0 percent of their body weight, with consequent loss of condition.
- **Reproduction:** Cows are less likely to rebreed when maintained on poor quality forage. In one study where inadequate energy was provided, the calving percentage decreased from 80 percent to 69 percent. In another study where protein was insufficient, pregnancy rates were cut in half. Reproductive rates are additionally depressed by the inadequate mineral levels (especially phosphorus) in poor-quality hay.
- **Calf performance:** Calves born to cows maintained on poor hay are more likely to be sick and/or die and subsequent growth can be affected. One study reported a 28-pound decrease in weaning weight due to inadequate energy from winter hay supplies.

To prevent performance problems such as those listed above, wise cattle producers test forages and build a supplementation program based on the results. Unfortunately, the cost of supplementation programs increases if forage quality is low.

Producers were asked to provide the harvest date of forages. Fescue hay harvested in May 2003, tested 11.0 percent crude protein. Fescue hay harvested in June tested 8.97 percent crude protein. This illustrates that harvest date has a great impact on hay quality.

Contact your county Extension agent for details about obtaining a forage analysis on your hay or silage. Samples may be taken as hay or silage is being har-

vested. Forage testing provides the information needed for cattle producers to improve their feeding program.

Important Time for Pasture Management

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Plant Sciences*

At this time of year, tall fescue pastures are not producing much growth, and hay is beginning to be fed to cow herds across the state. Even though pasture growth is slowing, carrying out a few simple practices now will have a major impact on the profitability of your cattle operation.

Take a soil test and fertilize accordingly. We often shortchange our pastures when it comes to fertilizer. And if we do fertilize, it may be with something like 19-19-19, without knowing whether this is meeting the requirements for adequate pasture growth or not. This is the time to take a soil test to determine the fertilizer requirements of the pasture. Use the results to get a fertilizer mixed that will provide optimum growth of the pasture when it needs to be fertilized in early March.

Control buttercup and thistle. These two weeds have become a big problem in Tennessee pastures. The good thing is that they are both relatively easy to control. The bad thing is that it is hard to remember to do it. December through late March is the time to spray these weeds. After three days in which the high temperature reaches 60 F, apply 2 pints of 2,4-D ester per acre. This rate of 2,4-D will not kill established white clover. If clover is not present and you have buckhorn or broadleaf plantain, use 4 pints per acre. Read and follow all label instructions. Finally, be sure to spray the weeds before you see any blooms. If you delay until April, you will be disappointed in the results.

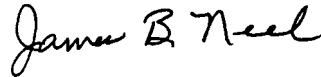
Seed red and white clover into pastures. Adding clovers to pastures can help in several ways. They decrease the nitrogen fertilizer requirement, since they take nitrogen from the atmosphere and use it. Second, they improve the protein and energy content of the forage the cattle will be consuming. And finally, some clovers will lengthen the grazing season of a pasture. Here are the

steps for getting clovers into pastures:

- Select the proper fields. You should want clovers in all the pastures, but only seed into fields where the pasture has been grazed down to less than 2 inches. A high stubble height can reduce establishment. Also, don't seed into a field that has been sprayed with 2,4-D for buttercup control within the previous six weeks. The residual activity of the herbicide will decrease seed germination. Also, do not apply any nitrogen fertilizer to fields that will be seeded with clovers.
- Use the proper seeding rate. White clover, red clover and annual lespedeza are the best species to use. Seed 2 lb per acre of white clover, 4 lb per acre of red clover and on hillsides include 8 lb per acre of annual lespedeza.
- Plant the proper depth. Clover seed is very small, so placing the seed too deep can cause poor emergence and establishment. If planting is done the last two

weeks of February, broadcast the seed and let the cattle trample it in for 3 to 4 days. The trampling, plus any freezing and thawing of the soil, will place the seed in contact with the soil without being too deep. If the seeding is done in March after the tall fescue has begun to grow, a no-till drill should be used. Place the seed no more than ¼ inch deep.

Following these recommendations will improve the quality and production from your pastures. This will improve the performance of grazing cattle. It is important to put these practices on your calendar as a reminder to do them this time of year.



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From:

Leader/Agent

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