



THE LEADING EDGE

CATTLEMAN

Mississippi/Alabama Cattle Producers



**August 2003
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Leading Edge Cattleman Program

Mission Statement:

"To improve profitability, management skills, and cattle of beef producers in participating counties."

**County Cattlemen's
Association President**

County Extension Agent

Leading Edge Participating Counties:

Alabama

Bibb
Fayette
Greene
Hale
Lamar
Pickens
Sumter
Walker
Tuscaloosa
Marion

Mississippi

Chickasaw
Clay
Lee
Lowndes
Monroe
Noxubee
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**ALABAMA BCIA
3RD Annual
Ag-O-Rama BCIA Heifer
Sale**

Saturday, August 23, 2003 – 11:00 a.m.
Winfield, AL

Selling 90 + Heifers!

18 Replacement Quality Bred Heifers

- Angus, Charolais, and Simmental Sired -

**75 Fall Born Top Quality Angus,
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- All Open Heifers are Eligible to be enrolled in the Leading Edge heifer Development Program at the Center -

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**For More Information And Catalogs,
Contact:**

Johnny Gladney
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(205) 349-4630

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(205) 367-8148

Michelle F. Elmore
Alabama BCIA
(205) 646-0115

www.albcia.org

Carlee Farms, Buddy Carlee **By: Katie Rochell, BCIA Journalism** **Intern**

Tucked away on highway 82 in Chilton County, Ala., Buddy Carlee's commercial operation is one of the top of its size in the state. In fact, his operation has been honored as the top weaning weight herd for his size category the last four years by Alabama BCIA.

From about 1970 – 1986, the family operation consisted of about 12 head.

“We began expanding in 1987, and by about 1990, our herd was up to about 140,” Carlee says. When Carlee



“The ryegrass helps the younger cow/calf pairs equal the weaning weights of the second and third-calf cows,” Carlee explained.

The more mature cows on Carlee's operation are given free-choice cottonseed and hay, supplemented with five lbs. soy hull pellets per day from December through mid-March.

Though the operation has used Artificial Insemination in the past, Carlee says that he doesn't currently use the technology and doesn't see it in the farm's future.

“Our bulls stay in the pasture for three heat cycles, or 65 days,” Carlee says.

There are about 30-35 head per cow breeding group on the farm in a typical breeding season, and at about seven weeks, 95% of the cows and heifers are bred.

Two-thirds of the steers produced by the operation are kept on the farm until about 10 months and then marketed through an organized teleauction. In the past four years, the operation has produced steers that average a 665 lb. weaning weight.

“Cows that don't produce heavy calves are culled,” He explains. “I bring order buyers through my herd – if they don't like what they see, I will make changes to my breeding program because it's buyer demand.”

began collecting BCIA records, his herd average weaning weight was around 500 lbs. Through selection, his herd average weaning weight now is around 650 lbs. each year.

Currently consisting of about 140 head, Carlee's 400 acre farm supports a herd that is about 90% ½ - 5/8 Simmental. Replacement heifers are bred back to Angus bulls to enhance marbling and eye appeal.

“There is not one thing that makes a good calf – it's a combination,” Carlee explains. “The main goal of our operation is to produce an eye appealing calf that will function on the farm.”

The criteria – “To try to select for easy fleshing bulls,” he says. “Frame size and 205-day weaning weights are also important to this operation.”

In order to produce a consistent calf crop, Carlee uses a rotational system, keeping first and second-calf cows on Marshall Ryegrass and White Clover until about June.

Of the 400 acres making up this operation, 350 actually support the cattle. The remainder is planted in Russell Bermuda, yielding about sixteen 3000 lb. rolls per acre.

Carlee has been an active member of the Alabama BCIA since 1989 and served as the 2000-01 president. He is also a member of the Chilton County Alabama Cattlemen's Association, where he is on the board of directors and has served a three-year term as president. Carlee is also Beef Quality Assurance (BQA) Certified, being trained through the Alabama Cooperative Extension System.

PROTECTING WATER QUALITY WHILE USING BROILER LITTER

Where broiler litter is available and properly handled, it is a valuable fertilizer for forages, especially bermudagrass hay fields. However, in areas of intense poultry production, over fertilization of pasture land with poultry manure occurs. The result is suspected ground water and surface water problems as excess nutrients run off the land or leach into ground water supplies.

According to soil fertility specialists, poultry manure should be applied to match nutrient needs of crops in order to get the maxi-

mum economic value of the plant nutrients in the litter and protect the surface and ground water.

The nutrient content of both layer and broiler manure will vary. For the remainder of this discussion, litter will refer to broiler litter. From 207 samples run through the lab from the mid-1980's through 1993, the average nutrient composition of Alabama broiler litter on a fresh weight basis was moisture—19.7%, total N—3.10%, P₂O₅—2.77%, and K₂O—2.04%. For practical purposes, we estimate the average analysis of broiler litter to be 3-3-2. As such, a ton of broiler litter will contain approximately 60# of N, 60# P₂O₅, and 40# K₂O.

Broiler litter is managed primarily for the nitrogen (N) content. However, N availability from broiler litter is the most difficult of the three primary nutrients to predict. About 1/3 of the total N in broiler litter is in the ammonium form and the rest is in an organic form. The amount of N available for plant uptake is ammonium nitrogen plus the amount of organic N that mineralizes during the growing season.

The P and K fractions are considered to be about 75% as effective as commercial fertilizers during the first year of application. If litter is applied at rates that will supply the entire N needed by the crop, P and K will probably be added in amounts that are greater than what is needed by the crop. Under frequent manure applications, P will build up to extremely high levels.

Non-point source phosphorus (P) pollution of surface waters is a huge concern in the environment. High P application in the form of fertilizers or manures can increase the risk of P transport to surface water, but unless there is loss in runoff, the risk is small. Extremely high P levels in the soil also increases the risk of P enrichment in water, but there must be detachment and/or dissolution and transport of P before there is an environmental concern.

Eutrophication can be caused by the nutrient enrichment of a water body. The movement of P in runoff from agricultural land to surface water can accelerate eutrophication. The result of eutrophication and excessive plant growth is the depletion of oxygen in the water. This is due to the heavy oxygen demand by microorganisms as they break down the organic

material. Phosphorus is usually the limiting nutrient in fresh water systems and any increase in P usually results in more aquatic vegetation. There are also concerns about clean drinking water, and the effects of high P in drinking water. Because of these concerns, it is important to properly manage P in fertilizers, manure, and the soil, to prevent nonpoint source pollution.

As a result of these concerns, USDA has developed a Phosphorus Index to assess the site and management practices for potential risk of phosphorus movement to water bodies. The P index uses specific field features and management practices to get an overall rating for each field. Not all field features and management practices have the same weight because research has shown that relative differences exist in the importance of each to P loss.

When the P index is put in place, and litter is spread on a field, the index requires that "setbacks" be used. This is a specified distance from public roads, field edges, ponds, running streams, and property lines. These setbacks are designed to keep P runoff to a minimum, and the setbacks vary, so they are not listed here.

When using broiler litter as a fertilizer, it is usually safer to use a Certified Animal Waste Vendor to do the spreading. Make sure you leave a "paper trail" to verify where and how much litter was spread, and the rationale for determining the amount spread.

How valuable is broiler litter as a fertilizer? Using a cost of ammonium nitrate at \$235 per ton spread, a cost of concentrated superphosphate at \$215 per ton spread, and muriate of potash at \$195 per ton spread, and an average analysis of broiler litter of 3-3-2, the fertilizer value of a ton of litter is approximately \$40 spread.

By using the tools available, and following the rules, cattle producers and hay producers should be able to use broiler litter as an economical fertilizer for some time to come.

Mid-Year Cattle Market Update

Walt Prevatt
Professor and Extension Economist
Auburn University



The current strength in cattle market prices has restored profitability to all sectors of the cattle industry. Two of the major factors that have contributed to the strength in the cattle market are strong beef demand and market leverage. Continued improvements in beef demand for the second quarter of 2003 recorded the highest average wholesale prices of all time. Also, an extremely current feeding inventory gave the feeding industry more leverage to keep beef meat supplies moderate during the spring and summer months.

The future direction of the cattle market is also showing some potential for future improvement. Great domestic beef demand, a manageable fed supply, a declining cattle inventory, lower levels of beef production, a smaller feeder cattle supply, and a large corn crop are all price supportive.

Beef Demand

Retail beef prices have continued to move higher during the first and second quarters of 2003. All-fresh retail beef prices were almost 3 percent higher during the first 6 months of 2003 compared to a year ago. Also, choice beef prices have shown a sig-

nificant increase (almost 7 percent year to date).

The U.S. economy is expected to maintain some growth and stable movement is expected for beef exports. New products and brands will be introduced that will be price supportive for beef. High retail and wholesale prices will continue to support market prices of all classes of cattle during 2004. In short, exports are stable and imports are down due to food safety and limited supplies in drought stricken areas.

Cattle on Feed

The July Cattle on Feed report showed cattle on-feed was below a year ago. The July 1 estimate reported the number of cattle on-feed (9.92 million head) was about 5 percent below 2002 and 10 percent below 2001. However, cattle on-feed dully July 2001 was the largest on record (since 1992).

Cattle feeders are expected to continue to be aggressive in their marketings of fed cattle due to favorable market prices and profits. Also, placements of cattle are expected to be above the five year average due to lower corn prices.

July 1 USDA Cattle Report

A modest reduction in the number of U.S. cattle and calves during the last 12 months was reported in the July 1 USDA Cattle Report. USDA estimated that all cattle and calves totaled 103.9 million head, down 120,000 head (1 percent) from a year ago. The 103.0 million head is the smallest number reported since 1990. As of July 1, 2003, beef cows totaled 33.6 million head down about 200,000 head, while dairy cow numbers were 9.1 million head down about

50,000 head from a year ago. The number of all cows that have calved was 42.7 million head, down about one percent from a year ago. The number of replacement heifers held for beef cow replacements was unchanged from last year at 4.6 million head. Dairy replacement heifers were 3.6 million head, down about 100,000 head (3 percent). Both the feeder supply and calf crop estimates were down about one percent from a year ago.

Looking ahead, current expectations about the January 1, 2004 Cattle survey are for it to report a modest decrease from a year ago. Thus, the present cattle cycle is well beyond the average 10-year time frame (1990-?). Some pertinent outlook questions may include 1) when, which, and where will cow-calf operations begin to hold back more replacement heifers, 2) what will the weather be in the coming months and how will it affect forage and grain crop conditions, and 3) what additional domestic or international factors might impact the U.S. cattle industry.

Feed and Forage Conditions

The 2003 growing season in most major grain growing regions is shaping up to be better than average. Thus, a better than average growing season coupled with a slightly larger acreage planted to corn should result in a large corn crop. Some analysts are projecting a near record corn crop (10+ billion bushels). Expectations are for corn prices to move lower which should allow feeders to bid feeder cattle and calves higher this fall.

Moisture and forage conditions in most regions are better than last year. However, hay making conditions have been very poor in many areas. Moisture conditions in the Rockies and areas west have been below normal. Much of this region is experiencing

moderate to severe drought conditions. Retaining replacement heifers and/or rebuilding cowherds is doubtful unless more moisture is quickly received in this region.

Canadian Import Ban

U.S. cattle prices have benefited from the ban on imports of Canadian beef and cattle following the May 20th identification of a Canadian dairy cow with BSE. Strong domestic beef demand coupled with lower beef supplies and lower beef and cattle imports have resulted in better than expected fed cattle prices. The stronger fed cattle prices have resulted in pulling fed cattle forward to meet the strong demand. This has kept cattle marketings current and limited beef tonnage. However, the U.S. cattle market remains nervous about reopening trade with Canada due to food safety and export market concerns voiced by U.S. trading partners (Japan, South Korea, etc.). Negotiations are ongoing to address the food-safety issues of Canadian beef, the potential to label Canadian beef, and possible procedures to reopen trade with Canada. U.S. beef producers should closely follow these negotiations and be prepared to use price risk management tools if necessary. A negative adjustment in U.S. beef prices is expected when an announcement is made.

Watch Wet Hay To Reduce Fire Risk

By Wayne Robinson, County Extension Agent

Too often in Lamar and surrounding counties we hear of someone losing a hay barn filled with hay to fire. This year with the frequent rainfall could certainly be a year to watch. Fires that damage or destroy hay and barns cost hay producers thousands of dollars in terms of building replacement, feed replacement and lost revenues. Proper harvesting and storage practices, even in a year like this one can practically eliminate hay fires.

Hay fires usually occur within six weeks of

baling, but they may occur in hay several years old. Fire can occur in loose hay, small bales, large bales or in stacks. The fires can occur in hay stored inside as well as in hay stored outside. Regardless of when or where the fires occur, the most common cause is excessive moisture.

Freshly cut forage materials are not dead. Some respiration continues and a very small amount of heat is produced. This heat generated by respiration is probably of little consequence except that it may help provide proper conditions for growth of bacteria. As the moisture content of the crop decreases during the curing process, respiration will slow and eventually cease.

Forage crops are always contaminated with countless microorganisms. These microorganisms are not a problem when the hay is harvested and cured to the proper moisture content before baling and storage. After baling, however, a small supply of air and a favorable moisture level cause the microorganisms to begin to feed and multiply, generating heat in the process. This heating continues up to a temperature of 130 to 140 degrees Fahrenheit, at which temperature the microorganisms tend to be killed.

If conditions are right, the temperature may decrease slowly at this point as the microorganisms are killed. The hay may go through several similar heating cycles during the next weeks as the population of microorganisms increases and decreases, but the highest temperature will usually be lower each time. Eventually the temperature will stabilize and no fire will result. There may be considerable heat damage to the hay causing decreased nutritional value.

If heat-loving bacteria are present when the hay temperature reaches 130 degrees Fahrenheit, and the heat is retained, a second heating phase may begin, generating enough heat to raise the temperature as high as 160 to 170 degrees Fahrenheit before bacterial activity ceases. The heat-loving bacteria and the resulting heat they generate can convert the hay to a form similar to a "carbon sponge" with microscopic pores. In this form, and at the high temperatures present in heated hay, the material combines readily with oxygen. It can self-ignite in the presence of air and has an unbelievable tendency to burn.

Use a probe and thermometer to accurately

determine how hot it is inside a stack of hay. Several probes and thermometers or several rods can be used at the same time in various locations in the stack of hay to complete a survey of temperatures in a short period of time. New hay stacked in the field or placed in a barn should be checked frequently for possible heating. At first, check in the morning and afternoon. If no signs of abnormal heating are found, the intervals may be lengthened. If the temperature reaches 130 degrees Fahrenheit, move the hay to allow increased air circulation and cooling. If you detect temperatures above 160 degrees Fahrenheit, a fire is imminent or one is nearby. The smell or sight of smoke means a fire is definitely present and the fire department should be called immediately. If this is the case, do not move any of the hay because this would expose the overheated or smoldering hay to oxygen and may result in a fire raging out of control.

CALENDAR OF EVENTS

August 23th - Ag-O-Rama, Upper Coastal Plains Experiment Station, Winfield, AL
Contact - Randall Rawls (205) 487-2150

- BCIA Heifer Sale
- Field Tours
- Youth Fishing Contest & Watermelon eating contest
- Antique Tractor Show and events
- Education programs and exhibits

September 4th - Annual Oktibbeha County Pasture Tour

Contact - Ed Williams (662) 323-5916

- Grazing study of corn interseeded into existing pastures
- New herbicides
- Alfalfa Management

September 18th - North Mississippi Dairy & Beef Cattle Field Day, N. Mississippi Experiment Station, Holly Springs, Ms

Contact - Ed Williams (662) 323-5916

September 30th - "Stretching Winter Feed Dollars" 5:30 p.m. Tuscaloosa Extension Office
Topics - Hay Sampling, Hay Storage, Forage Options, Choosing the Right Supplement & Beef Cattle Nutrition

Contact - Johnny Gladney (205) 349-4630