

Livestock Links

A Statewide Newsletter for Alabamians

Summer 2005

Greetings!

In 2004, the Alabama Cooperative Extension System moved toward a regional concept using regional Extension agents. In keeping with this concept, the Animal Science/Forages Team has decided to develop a statewide newsletter for Alabamians who are interested in animal science and forages. We hope to profile a producer each quarter and include a variety of timely articles on various topics. We will be including information about beef cattle, horses and goats as well as forages that pertain to all the species. If you wish to continue receiving this newsletter on a quarterly basis, respond as instructed on the accompanying insert. If you know others who might benefit from this newsletter, tell them to respond as well. We hope you enjoy this first edition and we look forward to providing you with timely information regarding animal science and forages.

Darrell Rankins Jr.
Extension Animal Scientist

Custom Weaning Calves – A closer look at Leo Hollinger

Kevan Tucker, Regional Extension Agent, Animal Science/Forages

Johnny Gladney, County Coordinator, Hale County

Record cattle prices and industry demand for preconditioned feedlot-ready calves as well as low grain prices has spurred the opportunity for a custom weaning operation.

Historically, most southeastern cow calf producers have not weaned feeder calves before sale, thus few producers have adequate facilities to wean cattle for the 45-plus days that industry prefers.

These limitations have restricted the opportunity and ability to market cattle in load lots both from a single producer and/or co-mingled producers.

Weaning feeder cattle comes with many challenges. However, Leo Hollinger of Camden, Ala., has 30 years of experience in preconditioning cattle for his personal backgrounding operation. He recently added a service component to his operation – custom weaning. He has set protocols for custom weaning and preconditioning customers; these include the vaccination of feeder cattle before the cattle arrive at his facility. This applies to individual producers as well as board sale groups.

He requires that the calves be vaccinated and boosted for infectious bovine rhinotracheitis (IBR), parainfluenza type 3 (PI3), bovine viral diarrhea (BVD), bovine respiratory syncytial virus (BRSV) modified live and blackleg, dewormed within 30 days, castrated and healed, and dehorned and healed. Hollinger says, “Death and mortality in calves vaccinated properly before arrival will decrease to below 0.5 percent.” Cattle that have received no vaccines can run as much as 5 percent mortality and 20 percent morbidity, according to Hollinger. When health issues are a problem, costs increase due to treatment and decreased performance.

The way cattle are fed and handled can have a great effect on cattle gains. Cattle are primarily fed a particular amount once a day that the cattle will clean up and still be ready to come to the trough the next day. Rations are soyhull based; however, he adds other grain by-products and ionophores to increase performance and decrease the incidence of bloat.

Hollinger has configured his facilities to properly confine bawling calves for the first 7 to 10 days in 2-acre lots. They are moved into 10-acre paddocks for the remainder of the weaning period. Fence-line feeders are used and tractor-towed feed mixer wagons deliver feed daily. It is at this point that cattle are evaluated for possible health concerns as well as daily performance. At the end of weaning, cattle are moved from their paddock to the sorting and load out facility via a network of lanes. Most paddocks are within a few hundred yards of the load out facility, therefore cattle can be easily and readily sorted for load out in a short period of time.

Five producers from the West Alabama Feeder Cattle Marketing Association (WAFcMA) capitalized on marketing advantages offered to them by custom weaning. First, being able to assemble cattle in a central location these producers were able to consign and offer for sale a 50,000-pound truckload lot of calves. Producers in the WAFcMA have stated on several occasions in the sale that having cattle in a load versus a smaller group would add \$50 per head. Second, the producers reduced the amount of shrink lost in postmarketing practices from approximately 9 percent to approximately 4 percent. This 5 percent difference in shrink on a 750-pound steer is 37 pounds. Thirty-seven pounds at \$1.19 was approximately \$44 per head. The third advantage of weaning was the cost of gain on cattle that gained 3.07

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pounds a day was 0.52 per pound of gain that was worth \$1.19 a pound. In the end, producers paid approximately \$80 per head for traveling and weaning and they received \$163 for their \$80 investment in 50 days. That is more than a 100 percent return on the money invested in 50 days.

“We currently have a capacity of around 3,000 head and have most of that space reserved from fall through winter,” Hollinger said. The demand from producers actually came faster than expected. That need from more and more cattlemen has spawned other operations to begin offering similar services including operations in Pickens, Montgomery and Fayette counties.

Health Program to Add Value Calves

Rickey G. Hudson

Regional Extension Agent, Animal Science/Forages

Leo Hollinger indicated how important health was to a successful weaning operation. Remember the decade-old ALA-VAC program fashioned by Jim Floyd, a former Extension veterinarian in Alabama? The ALA-VAC acronym means Alabama vaccination program to most people. While this is not entirely correct, an Alabama vaccination program is definitely the vehicle used to deliver the acronym's true meaning. ALA-VAC stands for Alabama Value Added Calf. Many Alabama beef producers have added value to their calves during the past decade by vaccinating calves and by documenting their health procedures on an ALA-VAC Calf Health Record & Processing form.

In the April issue of the *Gulf Coast Cattleman* magazine, an article written by Clifford Mitchell titled “Sickness Robs Profit – Pre-conditioning stops crime spree.” brings to light the importance of a health program to cattle feeders. Mitchell quoted one source as saying that his customers will pay four to five cents per pound more for calves that had received at least two rounds of a modified live vaccine.

The foundation for a sound health program for feeder calves should be to immunize them against diseases that are important to herd health and the feeder at the next level of production. Currently, many calf immunization programs will include an initial injection of a vaccine followed by a booster injection (carefully following label instructions) to provide protection against the following agents:

Clostridial diseases – usually a 7-way vaccine (blackleg and others)

Respiratory diseases – usually a 4-viral-agents vaccine

IBR – infectious bovine rhinotracheitis

PI3 – parainfluenza type 3

BVD – bovine viral diarrhea (type 1 and type 2 vaccine important)

BRVS – bovine respiratory syncytial virus

Pasteurella – available separate or in vaccine combinations

Pasteurella haemolytica

Pasteurella multocida

Haemophilus somnus – often available in vaccine combinations

Reproductive diseases – typically given to calves intended for breeding stock

Leptospirosis (5 strains of *Leptospira*)

Vibriosis (usually in vaccine combination with 5 strains of *Leptospira*)

*Brucellosis (*not in vaccination program – all states except Texas and Wyoming are currently Brucellosis free.)

In addition to immunizations, a good health management plan includes castrating male calves early, dehorning calves early, treating cattle for external and internal parasites, providing micronutrients in minerals or feed, training calves to feed/water from bunks and weaning calves 30 to 45 days before shipment. Consideration should be given to the growth benefits of implanting steers and non-replacement heifers if they are not destined for marketing in a natural beef program. Any health and immunization program for an individual farm should be designed and implemented under the advice and guidance of a veterinarian.

A quality health program will add value to calves. Documenting health practices and procedures with written records provides an opportunity to market these efforts. A copy of health records (including group and individual treatment sheets) should be forwarded with calves to provide their health history to the feeder. The sharing of information between all segments within the beef industry is becoming more critical to remain viable in today's competitive marketplace.

Fall Forage Bites. Want More?

Kent Stanford

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University studies have shown time and again that feed costs can be the largest expense on livestock operations. There are many alternatives to lower these costs; one effective method is to extend the grazing season during the fall. It is imperative to start planning now to ensure success later.

Goal #1: EAT ALL YOU HAVE. As the fall season begins, take advantage of intensive grazing. This method will make the most of whatever residual remains from the summer. The wet summers over the past couple of years left many producers with a large volume of forage in late summer. Realize that the quality will be low in this situation, so plan to use a protein supplement to meet the cattle's requirements and to also increase forage intake and digestibility. There are many commercially available blocks that will work well or a salt-based hot mix that includes a high protein meal, such as soybean or cottonseed meal, will also suffice.

Goal #2: STOCKPILE MORE. This can be done with both warm-season and cool-season perennials. Hybrid bermudagrass producing large yields can be fertilized in late August and left standing in the field to be grazed at a later date. Resist the urge to cut and bale this field. As the other warm-season pastures decline, animals can be rotated onto the bermudagrass and supplemented to meet their requirements. Dry, pregnant cows are most suited to this situation and can be strip-grazed to make maximum use of the field.

Fescue is unique in its ability to maintain quality during the fall and early winter months. It is this advantage that makes stockpiling fescue so appealing. Apply fertilizer in late summer to early fall and then keep animals off until the grass is needed. Strip-grazing can also be used to fully use the grass.

Goal #3: PLANT WINTER GRAZING. There are two thoughts on establishment of winter annuals. First, consider overseeding those pastures grazed down in Goal #1. With less standing forage there to compete with, a winter annual, such as ryegrass, should do well either drilled in or simply broadcast. With rotational grazing, there should be

significant animal manure present that could be scattered by dragging to assist with nutrient needs. Add clovers to the mix to increase quality and fix nitrogen in the soil as well.

A second consideration is to prepare a seedbed on which to plant cool-season annuals. Certainly this will require more expense, but is a tried-and-true method to provide grazing earlier than with no-till or broadcast. Once the field is ready to graze, use a controlled grazing method, such as timed grazing, to get maximum utilization. With fuel costs up dramatically, all producers should evaluate the expense of running equipment for harvesting, transporting, and feeding of hay and other crops. It is much cheaper to simply let the animals do it.

Of course, for any of the systems discussed to work, the animals must all be in the same production stage and similar body condition scores. If not, all the animals in the group will never receive the proper nutrition.

Feeding during the winter cannot be completely eliminated, but it is certainly possible to delay the start of feeding by following the suggestions above. An extra week or more before cranking up the tractor can free up time and ease the financial strain as well.

Using Soybean Hulls as an Animal Feed

Darrell Rankins Jr.

Extension Animal Scientist

One of the many factors that has helped Leo Hollinger to be a successful producer is that he has continually used low-cost, by-product feedstuffs. There are numerous by-products that are available for feeding livestock; for in-depth information on this topic, see Extension publication ANR-1237, which can be obtained from the county extension office or from the Internet at www.aces.edu

One such by-product that Hollinger uses in his custom weaning program is soybean hulls. Soybeans are processed for their oil and this leads to the generation of two by-products – soybean meal and soybean hulls. Both are used as animal feeds. Soybean hulls are actually the skin of the soybean, which comes off during processing. These soyhulls are quite small in size and are not dense. Therefore, many soyhulls are pelleted to increase ease of handling and bulk density. With respect to nutritional value, the loose and pelleted hulls are equal.

Most of the time soyhulls are priced competitively to corn. To determine which is a better buy, first determine how they compare on a nutritional basis. Corn contains 90 percent TDN (energy) and 8 to 10 percent protein. Soyhulls are not as straightforward. In fact, three different publications give them three different energy values, ranging from 64 percent TDN to 80 percent TDN. All agree that they contain approximately 12 percent crude protein. Why this discrepancy in TDN content? Primarily because of the way in which they are used. If a group of cattle is fed a diet that contained 90 percent corn and another group a diet that contained 90 percent soyhulls, then the results would show that corn would provide 10 to 20 percent faster gains than the soyhulls. However, when diets that contain only a small portion of the diet as corn or soyhulls are fed, then the soyhulls provide performance equal to that provided by the corn. For example, a group of cows have just begun calving. They have been consuming about 25 pounds of hay per day, but now that they are calving the hay must be supplemented. Compare corn and soyhulls. Supplement with 5 pounds of corn per day and the end result is that the cows are now consuming the 5 pounds of corn, but their hay consumption drops to about 18 or 19 pounds

per day. Their total energy intake is still greater than it was when they were consuming 25 pounds of hay, but the corn has a negative impact on total intake (now at about 23 or 24 pounds) and will also decrease the digestibility of the hay. To compare, supplement with 5 pounds of soyhulls per day. Now the final result will be that they will consume the 5 pounds of soyhulls and about 21 to 22 pounds of hay per day and the digestibility of the hay may be improved. Even though the soyhulls contain less TDN per pound than does corn, they are equal to the corn as a supplement for cattle consuming forages because of their positive impact on forage intake and digestibility. In addition to the positive effects with regard to the TDN fraction, soyhulls also contain more protein than the corn.

At Auburn University, several studies have been conducted on the use of soyhulls in beef cattle diets. In summary, when used as a supplement to a roughage-based diet they are equivalent to corn in energy value. In addition, soyhulls have been used as an excellent creep feed. Many backgrounded calves have been weaned onto free-choice soyhulls and gained in excess of 2 pounds per day for a 45-day backgrounding period. Soyhulls are extremely palatable and thus make an excellent choice in weaning diets.

In spite of all the positive attributes of feeding soyhulls, there are also some negative aspects. At high levels of intake (greater than 7 pounds per day), soyhulls are conducive to bloat and a bloat preventative should be used. A satisfactory method would be to feed a mineral supplement containing an ionophore, such as Rumensin or Bovatec, or mixing the ionophore straight into the feed. Also, always provide some access to long-stem roughage, whether it be hay or grazing. Quality of the roughage is not as important as particle size. This has only been a problem in growing calves; brood cows are not prone to bloat as a result of consuming soyhulls.

Soyhulls have also been shown to be an excellent supplement for sheep, goats and even horses when fed to those consuming a forage-based diet and supplemented at levels of 0.5 pounds per 100 pounds of body weight.

Alabama Horse Owner

We need your help. In 1994, we estimated the relative importance of Alabama's horse industry in the Alabama economy as well as the number and kind of horses in Alabama. Now in 2005, we are updating and expanding this work to describe the many ways that horse owning, raising, and use provides jobs and income to the state. A critical part of our study is to understand what people spend on their equine. If you are affiliated with the horse industry, we ask you to complete a brief Web survey about equine spending. We have some numbers; we'd like you to tell us whether they are high, low, or about right. Please go to: <http://www.ag.auburn.edu/dept/entplp/auburnorganics/alabamahorse/index.php>. The logon ID is ALABAMA, the password is HORSE. Thanks in advance for your help. Call Cindy McCall at (334) 844-1556 or Joe Molnar at (334) 844-5615 if you have questions. The Web survey also will give an opportunity to make comments and to request a copy of the results. Thank you.

Calendar of Events

- July** 5-8 State 4-H Horse Show, Montgomery
15-15 State 4-H Animal Science Competition Days,
Auburn University
22-23 GrazeFest II, Jackson, Miss.
- August** 6-6 Southern Regional 4-H Horse Show, Montgomery
6 Alabama Simmental Sale, Letohatchee,
Contact William Mayfield (205) 926-4221
19 Chilton County Open & Bred Heifer Sale, Clanton,
7:00 p.m., Contact Jack Tatum (205) 669-6763 or
Tommy Brown (205) 755-5431
26-27 Triennial Stocker Conference, Auburn University,
Contact Darrell Rankins Jr. (334) 844-1546
27 Ag-O-Rama BCIA Heifer Sale, Winfield, 11:00 a.m.,
Contact Johnny Gladney (334) 624-8710

The Alabama Master Cattle Producer Course will be offered again this fall at locations around the state. Cattle producers will learn about nutrition, health, reproduction, management and marketing, genetics, forages, yield and quality grades, and beef quality assurance from certified trainers. For more information and details on dates and locations, contact your county Extension office or the regional Extension agent for animal science in your area. Also, check www.aces.edu/animalforage/mcc.php for listings.

Quarterly Questions

Q. With regard to the impending Animal Identification Program, will I have to eartag my horse?

A. No. Species working groups are aware of traditional methods of identifying animals and will not recommend methods that are contrary to current practices. The goal is to provide valid identification without compromising other needs of a given species.

Q. I've heard that mosquitoes can transmit diseases to horses, what are they?

A. The two most common in Alabama are West Nile Virus and Eastern Equine Encephalomyelitis. Both diseases manifest themselves as nervous system disorders with a fairly high mortality rate in afflicted horses. Both are preventable by a vaccination program administered on a twice per year schedule.

Q. How many goats can I put on one acre?

A. In general, we can put about 5 goats where we can keep one cow. For many parts of Alabama we could put about 5 goats per acre.

Q. When should I consider using liquid nitrogen (urea) as a fertilizer?

A. It is best to use liquid nitrogen in the spring when temperatures are still cool. During summers when temperatures get quite high, as much as 25 percent of the nitrogen can be volatilized into the air and lost.

Fast Facts

Average gestation length:

- Cow – 283 days
- Horse – 335 days
- Goat – 149 days
- Sheep – 147 days
- Pig – 114 days



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