LIVESTOCK NEWS

Farm Credit Circuit Winners

By Tiffanee Conrad-Acuña

The Farm Credit Livestock 4-H Show Circuit Banquet was held this fall in Anson County. The show circuit is co-sponsored by Carolina Farm Credit and Cape Fear Farm Credit. Participants get an opportunity to show at several local county shows, and the points add up towards an overall Division Champion. The Showmanship Circuit is judged based on the youth's showmanship ability and not the quality of the animal. The goal is to make the animal look its best. This allows for a fair judging process, because if the youth work with their animals everyday, they have an opportunity to excel.

Participating Bladen County 4-H members included: Jeremy Beavers, Junior goats; Kim Beavers and Kyle Millward, Senior goats; Abby Inman, Cloverbud goats; and Shane Stewart and Shelby Stewart, Junior heifers. Shane Stewart won Reserve Champion in his division and received a trophy.

Participating Hoke County 4-H members included: Matthew Acorn, Cloverbud goats; Dixie Acorn, Novice goats; Johanna Carter, Paige Harrelson, and Clint Harrelson, Junior goats; and Stephanie Carter, Senior goats. Dixie Acorn won Reserve Champion in her division and received a trophy.

The youth worked really hard at feeding their animals everyday and learning everything they possibly could about them. Not only did they learn about livestock, they also enhanced their responsibility, self-esteem, and record keeping skills. Because of everything they learned and how hard they worked, they are all considered winners!
Animal Waste Management

Compiled by Becky Spearman, Bladen County Livestock Agent

Freeboard and Daily Precipitation Record (FRBD-1)

The Division of Water Quality (DWQ) requires swine producers to keep records on several waste management activities. The Freeboard and Daily Precipitation Record is one of those forms. This form is required for NPDES and general permits. The record requires the date and amount of precipitation to be recorded and initialed for any event within a 24-hour period. If no precipitation occurs, nothing has to be recorded. For storm events greater than 1 inch in 24 hours, an inspection of the waste management system must be made and documented. Producers must fill out the date, waste structure freeboard in inches (place for each lagoon), precipitation (inches), and your initials. Freeboard must be recorded weekly. Rainfall must be recorded after each event. Alternate forms can be used if approved by DWQ. Many integrators have approved forms that can be used. Call the Extension Center if you need a copy.

NPDES Permits -- Annual Certification Forms Due

The annual certification form is due by March 1. This certifies information and activities for the preceding calendar year (2005). The following web site has the forms: http://h2o.enr.state.nc.us/ndceu/Animal.htm; click on CAFO Annual Certification Form or you can call the Extension Center to request a copy. Please give us a call if you have questions on how to fill out your form.

Public Interference with Progress Energy Transmission Facilities

Progress Energy wanted to make producers aware of some potential hazards that can be created by interfering with transmission power lines and related facilities. Progress Energy has a number of safety measures in place including maintaining the rights of way beneath power lines. That means keeping the rights of way, or easements, clear of trees, structures, and debris that could affect the line or create safety concerns. They have installed equipment which will shut off power to a portion of the line if an electric flash occurs.

Even with these measures, interference by the public – often unintentional – remains a problem. Because the wires are not insulated, anything that provides a path from wire to wire, or from wire to ground, could result in an electrical flash or arc. Smoke from fields burning can cause power outages and other potentially serious problems. Other activities that have created problems locally include hog waste spray, irrigation spray, construction or farming equipment passing near or under the lines, or debris piled up beneath the lines. An electric flash is extremely dangerous to people and property and can also cause power outages along the line. These outages can cause significant monetary loss to industries that rely on high power quality for their processes and may result in legal action to recover their losses. For safety reasons, please be aware of these hazards and avoid working in or near the easement clearance along the lines.

10-Hour Initial Animal Waste Certification Training

January 30 - 31, 9 a.m. - 4 p.m., Cooperative Extension Center in Lenoir County.
Call 252-527-2191 to register.

Class will be $25 if you need a manual or $5 to attend.

Continuing Education Credits for Animal Waste Operators

January 30, 7 - 9 p.m., Cooperative Extension Center in Cumberland County (2 hours).
Call 910-321-6860 to register.

March 13, 10 a.m. - 5 p.m., Cooperative Extension Center in Brunswick County (6 hours).
Call 910-253-2610 to register.
The breeding season is just around the corner, and bulls are sometimes forgotten due to the activity of calving season. Bulls are just hanging out, waiting for their turn. The following are management tips before and during the breeding season.

**Before the Breeding Season:** Young bulls should be on a planned nutrition program. They need to gain 1.5 to 2 pounds per day. They need to gain frame, capacity, and muscle while losing any excess fat. Bulls that lose weight too rapidly will have lower fertility and may not make it to the end of the breeding season. Bulls need lots of exercise to get ready for the breeding season. Bulls in good physical shape have higher libido and will have fewer injuries during the breeding season. Placing feed and minerals at one end of a pasture and water at the other end will force bulls to make several trips per day. Young bulls should be kept with bulls their own age and weight. Young bulls can be injured when they are with older, more dominant, bulls. Bulls that can't walk or mount cows will not get cows bred. Bulls should pass a breeding soundness exam (BSE). If your new bull has never had a breeding soundness exam or if it has been longer than 4 months since his exam, he needs to have a breeding soundness exam. Breeding soundness exams are inexpensive compared to the cost of lost calves.

Older bulls also need to get into physical shape for the breeding season. Mature bulls should be in BCS 5 at the start of the breeding season and stay in BCS 4 to 5 during the breeding season. Most are fat after the winter and time off from last breeding season. Some may be too thin. Generally, mature bulls just need good-quality hay available at all times. The same exercise strategy used for young bulls should be used on older bulls. All older bulls should have a full breeding soundness exam before each breeding season. The exam will evaluate his reproductive systems, feet, legs, and eyes. If the breeding soundness exam is given 30 to 60 days before the breeding season, then producers have enough time to replace the bull if needed.

**During the Breeding Season:** All age bulls need some basic management during the breeding season to ensure a high pregnancy rate in cows. All bulls should be observed for the first few days of the breeding season to ensure they are finding cows in heat and able to mount and service cows. Breeding soundness exams do not check for libido (desire to breed) or breeding ability. Older bulls may lose libido and stop breeding cows. Injuries that were not apparent earlier may keep them from breeding cows. Bulls that have low libido or cannot mount need to be replaced. Young bulls sometimes have trouble servicing cows. Some will learn with a little practice, but others never are capable and need to be replaced. It is important that you actually observe bulls servicing cows to confirm their ability to breed.

Young bulls placed with older bulls get injured and breed few cows. Research indicates that in multisire breeding groups, the dominant bull will breed 60 to 75 percent of the cows. Even when the dominant bull is infertile, he will often prevent other bulls from mating with cows in heat. An option is to rotate bulls among breeding groups every 3 to 4 weeks. On most farms, the ideal cow to bull ratio is 25:1 or 30:1 for mature bulls and 15:1 to 20:1 for 15-month-old to 18-month-old bulls. The rule of thumb for young bulls is 1 cow for every month of age. Bulls should be monitored for body condition and injuries. Body condition should be monitored weekly. If bulls fall to BCS 4, they should be supplemented or they should be replaced. Bulls should be seen daily or at least several times per week and checked for injuries. Injured bulls should be replaced immediately.

Good management of your bulls will pay off. It is hard to make a profit with no calves to sell. So take some time to give extra attention to the guys, and they will do a better job with the ladies.

**Pasture and Turf Expo**

There will be a Pasture and Turf Expo on Thursday, March 16, from 4 to 9 p.m. at the Robeson County Fairgrounds, Highway 41 South, Lumberton. Specialists from North Carolina State University will speak on Establishment and Maintenance of Warm-Season Turfgrass, General Forage and Pasture Information, Turfgrass and Pesticides, and Specific Forages for Meat Goats and Beef Cattle. Come and visit with businesses that are involved in the pasture and turf industry. They will have booths set up for producers to learn more about specific topics. If you are a business that deals with the pasture or turf industry, please call Tiffanee Conrad-Acuña at 671-3276 to sign up for a booth.
Forage Management Tips

Information from the book Production and Utilization of Pastures and Forages in North Carolina

January
- To maximize stockpiled fescue, restrict the grazing area (cross fencing) so that 4 to 6 cows graze on an acre.
- If winter pasture is limited, feed hay in the pasture or allow cows to graze every other day. The priority for limited pasture is for (1) calves by creep grazing, (2) stockers, (3) nursing cows, and (4) dry cows.
- Winter annual pastures that were planted on a prepared seedbed may be severely damaged if animals trample on them during wet periods. Allow calves first priority to these high-quality annual pastures.
- Sample hay bales which are stored outside that will be fed during the next 4 to 8 weeks.
- Determine fields to overseed during late winter and early spring; obtain soil test and supplies for planting.
- Lime may be applied on sod during the “off season.”
- Keep a record of winter weed problems so that control measures can be taken next fall.

February
- Apply nitrogen to cool-season grasses to stimulate early spring growth.
- Lime fields that will be prepared for spring plants.
- Divide pastures to improve the quality and persistence of pasture plants.
- Locate sources of hybrid Bermuda grass sprigs for planting next month.

Goat Kidding Tips

By Tiffanee Conrad-Acuña

There are several preparations that you can do on your farm before the newborn kid goats start arriving. The first thing to think about is getting the doe ready. You can give her vaccinations and shots 30 days prior to kidding. It is a good idea to give her 2 cc of Perfringens CD and Tetanus toxoid combination and 1 cc per 40 pounds of Vitamin E and Selenium. Always make sure to follow the label! Fifteen days before kidding, the doe needs to start receiving a ration of ½ cup of goat feed gradually increasing to 2 cups per day. When the doe comes into milk, feed grain at 1 pound per day plus ½ pound for every pound of milk produced. Clip the hair around the doe's tail and vent, down her back legs, and under her belly. Start preparing a kidding pen with clean dry straw.

It is important to understand the signs of labor in does so that you can be prepared. It is recommended to isolate her on the early due date which is around 145 days gestation. Does usually kid in late afternoon or early evening. These are good times to check on her. The early signs of labor include: restlessness, smelling the ground, pawing at bedding, looking behind her, lifting tail, rises and lies down frequently, udder fills up, vulva becomes flabby, and a white discharge appears. A doe may show all these signs or only a few of them.

During the delivery, you can wash the genital area with udder wash, remove water buckets so that babies don't drown, and stay with the doe in case she needs assistance. The signs of final labor include: extensive discharge, strong labor pains about 2 minutes apart, ears stand out and lips curl, doe strains, a fluid filled bubble may appear, water breaks, second bubble appears, and feet or nose will become visible. Does usually deliver with the head lying on the forefeet with the chin on the knees or with both rear legs in the birth canal first with the kids back facing up towards the does back. These positions are usually normal and won't require any assistance. Abnormal positions include: head first with only one foreleg forward, head first with no legs forward, breach position with hocks first, breach position with rump and tail first, front feet first with head upside down, and feet first with head thrown back. Notice that there are many more abnormal possible positions than there are normal positions. To care for the kid, it is necessary to clear the newborn's nose and mouth of any fluid. Kids should try to stand within 15 minutes of birth. You can dip the naval with 7 percent strong iodine. Kids need 4 to 8 ounces of colostrum within the first 4 hours of birth. Kids are usually disbudded when they are 4 or 5 days old. Kids acquire immunity to most diseases from their mother in utero and are protected for the first 30 days. After that they need their own vaccinations. It is important to work on your herd-health program with your veterinarian and always read the label when giving medication or vaccinations.
Special management practices are required during the winter to ensure the health and proper body condition of your horse. This article will help you to develop feeding practices appropriate during cold weather. During cold weather, the horse requires additional energy to maintain its internal body temperature and keep warm. The amount of energy needed depends on the severity and extent of the cold period. In the Carolinas, horses typically endure a dramatic drop in temperature for 1 to 3 days followed by a return to moderate, normal temperatures. When environmental temperatures (including wind chill) drop below 45°F (known as critical temperature), a lot of energy is used by the horse to maintain its internal body heat.

The amount of energy required by the horse to meet its daily energy needs is measured as digestible energy (DE) in calories. The critical temperature can be used to estimate increased energy needs which the horse must receive from its diet. For each 1°F decrease below the critical temperature, the horse requires a 1 percent increase in digestible energy to maintain a consistent body temperature. Wind chill, moisture, and coat thickness will affect the critical temperature. The horse's thick winter coat has an insulating effect against cold and wind. If the coat becomes wet, the critical temperature will increase by 10°F to 15°F. The following formula is used to calculate the increased DE requirement for a horse as a result of cold temperatures and wet, windy conditions: critical temperature - actual temperature = percent increase in DE required.

Feedstuffs vary in the amount of internal heat produced when digested by the horse. A horse should consume at least 1.5 to 1.75 percent of its body weight as hay during cold periods. A 1,000-pound mature horse should consume 15 to 17.5 pounds of hay daily. During prolonged periods of cold temperature (several days below the critical temperature), both the concentrate and forage portion of the diets should be increased in equal proportions. The energy density of the concentrate mix can be increased by adding fat in the form of 4 to 8 ounces of a vegetable oil per day or by the addition of a commercial fat supplement according to label recommendations. Feeding of additional amounts of concentrate or increasing the energy density of the concentrate is especially important if the horse is in poor body condition with low body fat or is a "hard keeper." The extra body fat provides an additional insulating effect against wind and also serves as an energy reserve that can be used when the horse is fed an energy-deficient diet.

Maintaining ample water intake is the most critical part of ensuring the health of your horse during cold weather. The horse prefers a water temperature of 45°F to 65°F. Under normal conditions, a horse consumes 1 gallon of water per 100 pounds of body weight. A 1,100-pound horse will consume 10 to 12 gallons of water daily. As the water temperature decreases, the horse will consume less water. The same 1,100-pound horse may consume as little as 1 to 3 gallons of water daily when water temperature is 32°F. Low water intake is directly related to the increased incidence of impaction colic. Water intake can be encouraged by increasing the amount of forage being fed prior to a drop in temperature. The resulting increase of dry matter encourages the horse to drink more water. Concentrate mashes should be fed during the actual cold period when water temperature is below 45°F. Feeding 2 to 3 gallons of hot water daily mixed into a mash with a textured or pelleted concentrate mix will provide additional water intake. To avoid gas colic, allow the mash to sit for 15 minutes; this will permit the feed to expand prior to feeding. If possible, offer 10 gallons of water (at 65°F or warmer) twice daily. Break and remove ice from water tubs, making certain to provide water that is available free-choice.

Nine Steps to Effective Cold-Weather Management

1. Monitor weather forecasts to determine cold periods in advance.
2. Increase dry-matter content of the diet 24 hours prior to forecasted cold conditions.
3. Strive to keep your horse in good body condition prior to winter months.
4. Determine your horse's critical temperature and adjust DE intake accordingly.
5. Increase hay intake to horses in good body condition and "easy keepers."
6. Increase forage and concentrate intake for horses in poor condition and "hard keepers."
7. Supplement fat to increase the energy density of concentrates.
8. Feed the same concentrate as a moist mash during cold periods.
9. Offer at least 10 gallons of warmed water twice daily per horse.
### Upcoming Events

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<td>January 28, 8 a.m. - 12 noon</td>
<td><strong>Robeson County Meat Goat Pick-Up, 10020 Highway 72 East, Lumberton</strong></td>
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<td>January 28</td>
<td>Carolina Horse Management Conference, Sanford</td>
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<td>* 10-Hour Animal Waste Training, Lenoir County</td>
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<td>February 1 - 3</td>
<td>Southern Farm Show, Raleigh</td>
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<td>February 4</td>
<td>N.C. Youth Horse Judging Clinic, Raleigh</td>
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<td>February 4 - 5</td>
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<td>February 10 - 11</td>
<td>N.C. Cattleman's Association Annual Meeting, Hickory</td>
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<td>February 15 - 16</td>
<td>N.C. Pork Council Annual Meeting, Greenville</td>
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* See article in this newsletter for details.

** Call the Extension Center at 671-3276 to confirm date and time.

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Recommendations for the use of chemicals are included as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services does not imply endorsement by N.C. State University, N.C. A&T State University, or N.C. Cooperative Extension Service nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact Cooperative Extension.