Clinton Feeder Calf Sale

The Clinton Calf Sale will be held on September 16th at 7 pm at the Sampson County Livestock Facility. Cattle should be brought to the facility for grading, penning, etc. on September 16th between 7 am and 4 pm. For more information or to request a consignment form, please call Paul Gonzalez at Sampson County Cooperative Extension at 910-592-7161.

2009 Cumberland County Fair
Junior Livestock Show Schedule

Junior Market Lamb Show
Tuesday, September 15, 7:00 p.m.

Junior Swine, Feeder Calf Steer Show
Wednesday September 16, 4:30 p.m.
Auction, 7:30 p.m.

Junior Meat Goat Show
Thursday September 17, 7:00 p.m.

Junior Beef Heifer Show
Friday September 18, 7:00 p.m.

Disclaimer - The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University nor discrimination against similar products or services not mentioned.
Wildlife and Water Quality on NC Farms Workshop

A Wildlife and Water Quality Workshop will be held in Ammon on October 1st at 4 pm. Topics will include: Quail Management Practices and the Wildlife Tax Credit, Native Grasses, Soil Sampling, Nutrient Management Update, Riparian Buffers and Water Quality, Farm Bill Programs, and Coyotes. 2 hours of Continuing Education Credit will be offered. Dinner will be provided. For more information or to sign up to attend contact Benjy Strope at (910) 866-4636 or email cure_tour@yahoo.com with workshop in the subject line.

Temporary Adjustments in Lagoon Stop Pump Level

The NRCS Technical Guidance Document allows an optional, temporary, adjustment in the lagoon operating procedure. This adjustment in operating procedure allows the operator to pump into the top 8 inches of the treatment volume during the period of June 15th through October 31st to provide irrigation water during drought periods to establish or maintain vegetation in waste application areas and to allow additional temporary storage for excessive rainfall during the hurricane season and the following winter months. There are several restrictions to the rule. For more information, call your Extension or NRCS Office.

Calibration and Sludge Surveys

All farms are required to calibrate their irrigation equipment and perform a sludge survey. General Permit Farms are required to calibrate at least once every two years and perform a sludge survey every year (unless an extension from DWQ was granted). NPDES farms must complete both every year. The sludge survey forms changed in August 2008. Call your Extension Agent for more information.

Sludge Compliance and Removing Sludge

The compliance standard changed in August of 2008 and is now based on sludge volume as a percentage of the total treatment volume. Sludge accumulation in the permanent treatment zone must be less than 50% of the planned treatment volume. Also, there must be a minimum of 2.5 feet of liquid above the sludge at the pump intake location. If either of these conditions are not met, sludge must be removed or managed in accordance with an approved Plan of Action for Lagoon Sludge Reduction (POA).

Some producers may need to remove sludge. Sludge has more phosphorus, zinc and copper levels than the liquid layer. Before applying sludge to land, take a sludge sample to determine an application rate for the fields that will be receiving sludge. You need to have the sludge application recorded in your Waste Utilization Plan. Take a soil sample or look at a recent report for the fields you are considering applying sludge to. It is recommended to apply sludge to fields with low phosphorus and metal levels, as shown in a soil test. Recommendations are to apply sludge to fields not in your existing plan. If you are using a customer applicator or someone else is receiving your sludge, make sure they know the precautions.

CONTINUING EDUCATION CLASSES

September 24th (29th raindate) - Bladen County starting at 4 pm (2 hrs.). Call 862-4591 to register.

October 1st - Bladen County starting at 4 pm (2 hrs.). Call 866-4636 to register.

December 1st - Bladen County starting at 10 am (6 hrs.). Call 862-4591 to register.

December 8th - Robeson County starting at 10 am (6 hrs.). Call 671-3276 to register.

Forage Management Tips

From Production and Utilization of Pastures and Forages in North Carolina.

AUGUST
• Apply lime to pastures with pH below 5.8 to be over seeded next spring.
• Start harvesting corn silage in the hard dent state and when the dry matter is between 35% to 40%.
• Fertilize warm-season grasses.
• Fertilize fescue and keep cattle off of the pastures to be stockpiled.

SEPTEMBER
• Fertilize and lime cool-season grasses.
• Keep pressure on summer grasses and completely use them before grazing cool-season forages
• Watch for fall insects (armyworms, grasshoppers, crickets) on forages.
• Overseed or no-till winter annuals into summer perennial grass.
Where There’s Smoke, There’s Fire!

By: Michelle M. Shooter, Livestock Agent, N.C. Cooperative Extension, Robeson County Center
Information Adapted from Hay Fire Prevention and Control,

Fires that damage or destroy hay and barns cost farmers thousands of dollars in buildings, feed costs, and lost revenues. Many of these fires are caused by the spontaneous combustion of hay that occurs within six weeks of baling. This article hopes to describe what causes these fires and snuff them out.

What Causes Hay Fires?
Freshly cut forage is not dead; it is still respiring or burning sugars to produce energy. This respiration produces heat that releases into the bale. If the hay was baled at the proper moisture concentration, the respiration slows and eventually ceases. The heat generated by respiration is normal. However, if bale moisture levels are too high (greater than 20 percent), the heat and moisture will provide a suitable environment for the growth and multiplication of warm temperature mesophilic bacteria. The respiration of these bacteria releases additional heat in the bale, and interior bale temperatures can reach 130°F to 140°F. At this temperature range, most mesophilic bacteria die and interior bale temperatures start to decline.

Baled hay becomes a potential fire hazard when the interior bale temperature does not cool after the first heating cycle. This occurs when the heat created by the mesophilic bacteria provides an environment favorable for the growth and multiplication of heat-loving, or thermophilic, bacteria. The thermophilic organisms multiply, and the heat produced by their respiration can raise the interior bale temperature to 170°F! At this temperature, the hay becomes damaged and, if combined with oxygen, can self-ignite!

Reducing the Risk of Hay Fires
Hay moisture concentration has a major effect on the microbial activity that can lead to hay fires. Hay should be cured to the proper moisture concentration prior to baling. Baling at a moisture concentration of 20 percent or less for small rectangular bales or 18 percent or less for large rectangular or round bales is recommended.

Weather conditions during hay curing have the greatest influence on achieving proper moisture concentration. Ideal hay-curing weather is slightly windy with a relative humidity of 50 percent or less. Hay should not be baled in the early morning, because its moisture concentration increases overnight when the air is humid.

Hay that is baled at the proper moisture concentration can become a potential fire hazard if it becomes wet during storage. Hay barns should be weather tight and have adequate drainage, so water will not enter the barn and damage hay during storms. Hay that is temporarily stored outside should be covered with plastic or some other waterproof material to prevent rain penetration. Uncovered bales should be arranged so that air can circulate freely between bales to promote drying. Protect bales from ground moisture by placing them on a bed of gravel, old tires, poles, or pallets.

Make Hay and Be a Part of the N.C. State Fair

By: Michelle M. Shooter

The 2009 North Carolina State Fair is just around the corner, and there are many opportunities for you to be involved. One great way to be involved and market your farm is to enter your hay in the Forage Show. There are nine classes of hay judged in the show. Hay is judged both on sensory characteristics and on its chemical analysis. More information, including prizes, rules, classifications, and entry forms, can be found in the online premium book at: http://www.ncstatefair.org/.
Hay is class D, found on pages 28-29.

We make some great hay in North Carolina! A good way to demonstrate North Carolina hay quality is through the state fair. For individuals entering the hay contests, benefits include having a forage analysis for ration balancing and marketing, having their hay displayed in a high visibility area for the duration of the State Fair, the $55 first prize (in each of nine classes), and bragging rights for the next year. The entries are then used all over the state for education purposes.

The entry process is easy. Take a forage sample and send it to the NCDA lab before September 18. Label it as a State Fair entry. The cost is $10, the only fee. Fill out the fair entry form (found on-line) and send it in before September 25. Get a six-inch block of hay (same hay that was analyzed) to the fairgrounds before 10 a.m. on Thursday, October 15.

For more information, contact your Livestock Extension Agent.
The “Got to be NC” Quality Replacement Heifer Program

Dr. Gary Hansen, North Carolina State University Vernon James Center, Plymouth

As I have traveled over the State of North Carolina, I have asked cattle producers what are some of the problems they face in their cattle operations. Most have identified having the ability to purchase quality replacement heifers as one of their highest priorities. With this in mind, personnel from the North Carolina State Cooperative Extension Service, North Carolina Department of Agriculture and Consumer Services, and North Carolina Cattlemen’s Association initiated a replacement heifer program to provide cattle producers a venue where quality heifers could be purchased from reputable NC producers. In part, this article is to introduce to producers the “Got to be NC” Quality Replacement Heifer Program. The objectives and requirements to participate are listed below.

Program Objectives
- Develop programs to help NC beef producers improve the quality of beef products produced within their enterprises.
- Increase the adoption rate of integrated management practices by NC cattle producers that will improve over all long-term production efficiency and profitability of beef cattle herds.
- Develop working relationships between cattle producers, veterinarians and livestock agents that will advance technology transfer, enhance information exchange and improve management of beef cattle enterprises in NC.
- Expand marketing opportunities and increase the value of North Carolina beef heifers.
- Establishment of known sources of superior replacement heifers in terms of genetic potential and management criteria.
- Improve heifer development programs through a Total Quality Assurance approach.

Program Requirements for Enrollment

Health Requirements- Participants need to be Beef Quality Assurance (BQA) certified and BQA procedures must be followed in administration of all pharmaceuticals as well as animal handling and husbandry issues.

Vaccinations:
- Pre-weaning/Weaning - Heifers need to be vaccinated and boostered for IBR, BVD, PI3, BRSV, leptospirosis (5-way), vibriosis and 7-way clostridia. It is recommended that heifers be 5 months of age or older at the time of vaccinations. Vaccines containing or demonstrating protection for both Type 1 and Type 2 BVD are preferred. Read and follow label directions for all pharmaceutical products used.
- Pre-breeding - For maximum protection against reproductive losses, it is recommended that heifers be vaccinated with leptospirosis (5-way) and vibriosis 30 to 60 days prior to breeding. A booster vaccination for IBR and BVD is required 30 to 60 days prior to breeding. If a modified live vaccine is used then one dose is sufficient. If a killed viral vaccine is used, then two boosters are recommended. Read and follow label directions for all products used.

Pregnancy examination - A booster vaccination against leptospirosis (5-way) is required at pregnancy exam.

Parasite control: All heifers must be treated for internal and external parasites within 30 days prior to arrival at a development center or an approved sale. Products used must be labeled for the control of immature stages of the parasites life cycle and administered in accordance to manufacture’s label.

Physical Requirements
Age - Stated birth date with projected age at breeding being 12 to 15 months of age and projected calving date at 22 to 25 months of age.

Structure - All heifers must be evaluated for structural soundness by a livestock agent prior to arrival at the development center or sale. Heifers with active cases of pinkeye or bad eyes resulting from a pinkeye infection or other sources will not be allowed to sale. Heifers with rat-tails, bobtails, horns or other deformities will not be accepted. Dehorned heifers need to be healed prior to participation in the program. Heifer displaying lameness or undesirable temperaments will not be permitted to participate.

Frame scores - All heifers will be required to fall within a frame score of 4.0-6.5 using the BIF standardized table or equation.

Muscle scores- All heifers must meet a minimum muscle of 2.0 using the USDA feeder cattle scoring system.

Reproductive requirements
Pelvic measurement- All heifers must have a minimum adjusted yearling pelvic area of 150 cm² or greater at pre-breeding examination or a pelvic area of 180 cm² or greater at pregnancy examination to participate in an approved sale. Pelvic rechecks will be done at pregnancy diagnosis and cannot be done more than twice in a heifer’s life. Animals not meeting the criteria will be removed by the owner.

Continued on page 5
Replacement Heifer Program - Cont. from page 4

Reproductive tract scores- All open heifers 12 months or older must have a reproductive tract score of three or better (using the Colorado State reproductive tract scoring system) to qualify to be sold in an approved sale.

Pregnancy examination- Heifers must have an initial pregnancy examination performed 90 days from the start of the breeding season. Individual animal identification, pregnancy status and fetal age (~days) are required to participate in an approved sale. Heifers bred through artificial insemination must have original breeding dates. Heifers failing to become pregnant during or loses a pregnancy following the original breeding season is no longer eligible for the program. Calving dates as determined by pregnancy examination must fall within a 45 day period to be eligible to participate in a sponsored sale.

Implants- Implants are discouraged from being used. However, if heifers are implanted, only FDA approved products for replacement heifers may be used.

Animal Identification- Heifers will need individual farm identification to participate in the program. RFID tags that are ISO compliant will be the preferred method of identification. Heifers meeting NC heifer development program standards will be tagged with a NC heifer tag.

Ownership Requirements - Purchased heifers enrolled in the program must be owned a minimum of 60 days prior to breeding. All purchased heifers must be accompanied with an affidavit indicating the name and address of the original breeder and approximate birth dates of the heifers. Heifers must be owned by residents of North Carolina in order to sell in a sanctioned NC heifer sale.

Sale Eligibility
Age- Stated under physical requirement section.
Frame scores- Stated under physical requirement section.
Disposition- Heifers displaying wild behavior or aggressive temperaments as determined by the local NC Heifer Committee will not be permitted to participate.

Body Condition Score and Weight- All heifers must be in body condition 5 to 8 (1 = emaciated; 9 = obese) and weigh a minimum of 800 pounds. Local NC Heifer Committees will insure these requirements are met.

Health Tests- Test negative for BVD-PI. Tuberculosis test will be required for animals sold out of the state. All natural service sires must be BVD-PI negative.

Pregnancy Guarantee- As stated under pregnancy examination section.

Recommended Mineral Requirements and Ionophore Use- In addition to other nutritional requirements, it is strongly recommended that cattle have access to a free-choice mineral containing a minimum of 1,000 ppm copper (no copper oxide), 26 ppm selenium, 2,000 ppm zinc, and 1,000 ppm manganese based on a 4 oz. daily intake formula, or twice those levels for a formula designed to give 2 oz. daily intake. For cattle fed a total mixed ration, a mineral premix should be added to increase copper level to 10 ppm, selenium 0.3 ppm, zinc 20 ppm, and manganese 10 ppm in the diet dry matter. Every effort should be made to provide cattle their requirements for major mineral and vitamins. Feeding an ionophore (Rumensin or Bovatec) is also recommended where not prohibited by specific program requirements. Adequate trace mineral status is important to maximize the animal’s response to vaccines, and ionophores reduce problems related to coccidiosis which is common in weaned calves (BQA Feeder Calf Sale protocol).

County livestock agents will help to coordinate the program in each county and facilitate animal measurements in heifers participating in the program. For more information, contact your Livestock Extension Agent.

Cattle Industry Assessment Referendum

The North Carolina Cattlemen’s Association (NCCA) has announced that the N. C. Cattle Industry Assessment Referendum vote will take place on October 6, 2009. NCCA says that the referendum language will be to assess all cattle one dollar per head for the purposes of promoting the cattle industry in North Carolina. The funds will be used for producer education – regarding beef production topics, beef production research, youth education and leadership development events, NCCA administration, beef industry leadership development, promotion and marketing of NC cattle, and promoting the interests of the cattle industry. Current beef checkoff funds cannot be used for any of these purposes. All North Carolina cattle owners over the age of 18 are eligible to vote during the regular business hours of their County Extension Office. Producers can request an absentee ballot by calling your Extension Office. More information will be available closer to the voting date.
Over the last few years, cases of a rare neurological condition in horses, called Stringhalt, have been seen with increasing regularity on horse farms around the world. While this disease has been well documented in its original form for years, a sudden increase in a condition that is very similar to and often confused with Stringhalt has come under scrutiny as equine owners and veterinarians struggle to figure out why this is occurring. The prevailing theory behind this new form of this condition (referred to as Australian Stringhalt) is an ingestion of an unknown toxin in the commonly seen pasture weed called False Dandelion or Flatweed.

The “original” Stringhalt (we will refer to this as true Stringhalt) is a neurological condition in horses that severely affects mobility, usually in the tendons of the hind legs. Symptoms are involuntary jerking or extreme difficulty in moving (flexing) the hind legs. Affected horses often have an exaggerated “popping up” of the legs towards the belly, stumbling and/or involuntary leg tremors. Also, horses can move backwards very little if at all. These symptoms may be present at all times, or may come and go over a period of months for no apparent reason. Once a diagnosis has been made, it will take as long as 18 months of neurological treatments to cure the disease.

Australian Stringhalt has almost the exact same symptoms associated with the back legs, with the exception of the affected horses being able to back much better than horses stricken with true Stringhalt. Also, unlike true Stringhalt, horses with Australian Stringhalt will usually recover in as little as a few weeks after they are removed from the source of the toxin.

While there has been very little documentable research on this condition, what few research trials that have been conducted have focused on finding either a toxin or a fungus in the Flatweed plant (pictured at the website listed below) [http://www.ppws.vt.edu/scott/weed_id/hryra.htm](http://www.ppws.vt.edu/scott/weed_id/hryra.htm). Also, while much more rare, Catsear Dandelions as well as True Dandelions have been linked to cases of Australian Stringhalt.

So far, there have not been any clear answers on how or why this condition occurs. One horse in a pasture may develop this condition while 2-3 of its paddock mates may never develop the first sign of any problems. There have even been research trials where horses who have developed Australian Stringhalt in the past were fed a ration of strictly Flatweed for weeks afterwards and never developed any additional problems. It is not known if it will only affect certain horses, if the toxins are only present in the weeds under certain environmental conditions, etc… Without knowing the exact cause of this disease, it is difficult to definitively say how to keep this from affecting your horses. While this disease has been reported in horses of all breeds, Thoroughbreds seem to be more susceptible than other breeds.

The only clear way to keep this mysterious condition from becoming a bigger problem for the horse industry is to develop a comprehensive pasture weed control plan to keep Flatweeds from growing on your farm. Fortunately, the Dandelion family is not very difficult to control through the use of selective herbicides. 2,4-D, at a relatively strong rate (3 pints per acre) will give good control, especially if sprayed when the plants are relatively small. The more broad-spectrum products in the 2,4-D family (Weedmaster, Grazon, Forefront, etc) will all give very good results as well, especially as the plants get older and more established.

While it may be several years until the exact cause of this baffling condition is found and a more comprehensive health program is devised to deal with this disease, but at this point having your paddocks void of any weeds in the Dandelion family is the best defense.
Many goat farmers have reported huge death losses this summer because of heavy worm loads. The rain and warm weather that we have gotten this year has helped the worm population to thrive. That is why it is really important that you use your FAMACHA card to check the eyelids of your goats for anemia levels more often than you normally do. Once a week can really help you to identify anemia problems early. The anemia is caused by a parasite called Haemonchus contortus, or barber’s pole worm. It is the biggest disease problem of goats throughout North Carolina. Animals with low production and even death can arise when this worm is not properly controlled.

Due to overuse of dewormers over many years, resistance to these dewormers is an increasing problem. On many farms, there is resistance to all the groups of deworming drugs, which puts the goat herd in major jeopardy. We must not rely on the excessive use of drugs alone if we want to control this parasite in the future. Selectively deworming only those animals that require treatment greatly decreases resistance problems.

Once problem goats are identified, they can be targeted for special attention without the whole herd having to be treated. In the long term, by culling animals that are repeatedly identified as unable to cope with moderate worm burdens, a more resistant and resilient herd, genetically suited to the environment can be bred. This is because researchers have proved that the ability to prevent infection and the ability to withstand the effects of parasites have been shown to be moderately heritable. This encourages us to cull animals from the herd when records continuously show us problems.

Another management tool you can use to reduce worm problems is to follow stocking rates recommendations. The rate for your pasture can be anywhere from 6-15 goats per acre depending on forage yield. Having too many goats on a small acreage can multiply your problems. Some obvious signs that your goats may have high worm loads are pale gums or eyelids, rough hair coat, diarrhea, low milk production, off feed, lethargy, abnormal temperature, dehydration, chronic coughing, and bottle jaw (swelling under the jaw). If you’re not sure about the proper way to deworm your goats or don’t know how to check if they need it, please call your local Extension Agent for help. If you would like to know more about the FAMACHA system, the next class will be held at the Richmond County Cooperative Extension Office on **Monday, September 14th at 6 pm** followed by an Adult Meat Goat Club Meeting. Please call Tiffanee at 910-997-8255 for more information and directions.
1. What breed chicken should I choose?

This depends on whether you want to raise chickens for eggs, meat, or both. Birds of the Mediterranean class are among the best egg layers and include Leghorns and Minorcas if you want white eggs and Golden Comets and Red Sex Link if you want brown eggs. In general, birds with white ear lobes lay white eggs and birds with brown ear lobes lay brown eggs. These are considered some of the best layers and can lay as many as 240 eggs per hen per year. These birds are not good meat producers.

For meat production, Cornish fowl or a cross of Cornish with Plymouth Rock are good breeds. They should reach 4-5 pounds in about six weeks. These breeds are not good for egg production.

Dual purpose chickens are those that are fairly good layers (about 165 eggs per hen per year) and are also fairly good meat producers. These breeds include Plymouth Rock, Dominique, Rhode Island Red, Buckeye, New Hampshire, and many other breeds.

2. Where can I get birds?

You can order chicks from commercial hatcheries including but not limited to: Ideal Hatchery, Strombergs, Morris, and Murray-McMurray. Many local feed or hardware stores can order chicks for you. The “Agricultural Review” newspaper published by NCDA & CS is also a good source for birds and equipment. Other sources include local growers and the American Livestock Breeds Conservancy.

3. Should I vaccinate my birds?

The only vaccination your birds really need is for Mareks Disease. This vaccination is normally done at the hatchery at day old. If you start vaccinating for other diseases, you will need to continue this practice for each following flock. If you are an organic grower, you can still have your birds vaccinated for Mareks Disease since it is done at the hatchery.

4. Can I let my birds run free?

Yes, but only on your property. NC General Statute G.S. 106-540; 02NCAC 52B.0607 POULTRY RUNNING AT LARGE, reads: a) A person owning or having legal custody of any poultry shall not maintain poultry in any manner that creates a reasonable likelihood that poultry will wander outside of the legal boundaries of the property on which they are kept. b) A person owning or having custody of any poultry shall not allow said property to wander outside the legal boundaries of the property on which they are kept.

5. What kind of bedding should I use?

Dry pine shavings are normally the bedding of choice. However, pine shavings are getting scarce and expensive. Other options include rice hulls, peanut hulls and ground corn cobs. Hardwood shavings should be avoided because mold called “aspergillosis” sometimes grow in hardwood shavings that can be inhaled by the birds. This mold can lead to bird death. Another word of caution, damp pine shavings can also produce this mold.

6. At what temperature should I store eggs for consumption?

It is recommended to store eggs at 45 degrees F.

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**2009 Small-Scale Egg Production in a Range Setting Field Day**

The field day will be on September 2nd starting at 8 am at the Wayne County Extension Office located at 208 West Chestnut Street in Goldsboro, NC 27533. The topics are: Small flock: Husbandry practices and breeds, Health Programs, Biosecurity and How to be a Good Neighbor, North Carolina Dept. of Agriculture & Consumer Services Programs, Heritage Breeds to Choose for Egg and Meat Production on Range Conditions, Marketing your Final Product, and a tour of backyard flock Gary Christman's farm, Happy Hen Egg Farm in Snow Hill. The cost is $25.00. Checks can be made payable to NC Breeder & Hatchery Association and mailed to Dr. Ken Anderson, Box 7608, NCSU, Raleigh, NC 27695-7608. Call your Extension Agent for more information on the field day.