

Guilford County Center
North Carolina Cooperative Extension
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Cattle Round Up

September 2014



Guilford County Extension Beef Newsletter

Guilford County September 16th Cattleman's Program

On September 16th beginning at 7:00 pm at the Guilford County Agricultural Center, area Cattlemen will be getting together for an educational program by fellow Cattle Producers Curtis & Don York on Building & Improving Soil Health while Extending Grazing Days. It seems like everywhere you turn we more about this topic, well there is a good reason, it works while at the same time Improving Production while Reducing Costs. You will hear and see from their experiences with grazing various forages how this works. This will be a catered event, so please call if you are planning to attend this Program, CALL Ben Chase, Area Extension Livestock Agent at 800-666-3625 or 342-8235 (or Email me at ben_chase@ncsu.edu) BY FRIDAY September 12TH TO RESERVE YOUR PLACE FOR (DUTCH) DINNER.

Please plan on attending this Cattleman's Program on Tuesday September 16th beginning at 7:00 pm at the Guilford County Agricultural Center, located at 3309 Burlington Road in Greensboro. This will be an evening focusing on beef cattle & forages and their management and the enjoyment of getting together with other cattle producers.

There will be no food served at the program so please call to RESERVE YOUR PLACE FOR (DUTCH) DINNER by September 12th.

Bear Program

What: Bears in Our Neighborhood? Are We Ready for Them?

Who: Colleen Olfenbuttel, NCWRC Bear Biologist, and lead author of the NCWRC Black Bear Plan of 2012. The event is sponsored by the Hunting and Wildlife Advisory Committee to the Rockingham County Board of Commissioners.

When: Thursday, September 18 @ 7 PM

Where: Rockingham County Ag Center, 525 NC 65, Wentworth

Why: Bears are expanding their range into the Piedmont from the mountains. More are sighted every year. What will they mean to our farms, back yards and woodlands? What can we do to enjoy them and yet protect ourselves from damage? Also, we have a new bear season here. Why?

This meeting will feature a brief opportunity at the end for sportsmen and landowners to voice their concerns to help guide the HWAC.

The meeting is free. No refreshments will be provided; don't come hungry for anything but good information!

For more information about this program, contact Peter Bromley at pbromley42@gmail.com.

April Shaeffer and Jeannette Moore, N.C. State University Department of Animal Science

We are very excited to be working with the Southern Risk Management Education Center to provide women cattle producers a chance to network and to enhance their cattle handling skills. The "Leadership and Cattle Handling for Women Producers" workshop is designed to provide leadership training for female cattle producers in North Carolina and to provide hands-on experiences led by professionals in the field. We hope to encourage more women to be active as leaders in the North Carolina Cattlemen's Association and in their communities. This event is limited to twenty participants in order to maintain small group size and to allow the opportunity to be active and gain hands-on experience. The workshop will cover Low Stress Cattle Handling, Reproductive Health Practices, Pasture Management, and General Health Management (including proper vaccination techniques, deworming, and ear tagging).

Agenda for Saturday, November 8, 2014 at the NCSU Butner Beef Cattle Field Lab in Bahama, NC

9:30-9:45	Introduction and Program Purpose (April Shaeffer and Dr. Jeannette Moore, N.C. State University Department of Animal Science)
9:45-10:10	Becoming a Leader in the Cattle Industry (Bryan Blinson, Executive Director, North Carolina Cattlemen's Association)
10:10-10:40	Low Stress Cattle Handling Information (TBA)
10:45-11:15	Low Stress Cattle Handling Demonstration (TBA; all 20 participants view)
11:20 to 12:10	First station (6 participants at each of three stations)
12:15 to 12:45	Lunch (provided)
12:50 to 1:40	Second station (7 participants at each of three stations)
1:45 to 2:35	Third station (7 participants at each of three stations)
2:40 to 3:00	Questions and Program Evaluation (April Shaeffer, Dr. Jeannette Moore)
3:00	Adjourn

3:00 (optional) April Shaeffer will help any participants who would like to try the Low Stress Cattle Handling technique.

Stations – 1. Proper techniques for vaccinating, deworming, eartagging, and checking teeth 2. Pasture Management, Strip Grazing and Fencing 3. Reproductive Health Practices

Recognition and Treatment of Bovine Respiratory Disease Complex

John F. Currin and W. Dee Whittier, Extension Specialists and Professors, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Tech



The recognition and treatment of Bovine Respiratory Disease Complex (BRDC) is vital to the economic well-being of the stocker cattle producer. This disease is also known as shipping fever, or simply pneumonia. BRDC is a very complex, multifactorial disease that involves several instigating factors. These factors include marketing, weaning, shipping, mixing cattle from multiple sources, weather, nutrition, and the respiratory viruses (IBR, BVD, PI3, BRSV). All of these causes can result in a calf developing pneumonia. These calves usually develop a bacterial pneumonia most often caused by *Pasteurella Haemolitica*. *Pasteurella Multicida* and *Haemophilus Somnus* are also known to cause pneumonia.

Calves most often become sick following stressful situations such as weaning or marketing. The clinical signs are usually seen 7-21 days after the calves are bought, but can occur anywhere from 2-30 days after purchase. Less frequently, calves that have not been marketed or weaned can develop pneumonia, usually related to weather changes or other stressors.

The most common and earliest recognizable clinical sign of pneumonia is depression. Calves exhibiting depression will have drooping ears, an extended head, a bowed back and/or often isolate themselves from other cattle. As these calves get progressively sicker, they will go off feed and will exhibit an increased respiratory rate. Increased lung sounds can be heard with the aid of a stethoscope. A thermometer is another useful tool in the diagnosis of pneumonia. Most sick calves will have a fever of 104° -108°F. However, temperatures can be falsely elevated in the afternoon due to increased outside temperatures. In order to obtain the most accurate temperature reading for an animal that is suspected to be sick, the calf's temperature should be taken before 10:00 am.

Developing a Treatment Protocol - There are four primary questions to be answered when developing a treatment protocol: When do I treat the calf? - Early treatment of calves is the most important aspect of a successful treatment program.

Therefore, calves should be observed often and when any of the clinical signs listed previously are detected, the animal's temperature and breathing sounds should be analyzed.

What antibiotic should I use? - Today there is a new generation of antibiotics which combine effectiveness with the benefit of less frequent or even one time treatments. These include Micotil®, Nuflor®, and Baytril 100®. All of these antibiotics offer subcutaneous dosing and are usually effective against the organisms that cause BRDC. Naxcel®, Excezel®, and Adspect® are also commonly used antibiotics that have short slaughter withdrawal periods or no withdrawal periods at all. While they must be given every day, they should be effective in most cases.

What other drugs may help? - (It is important to note that these drugs may be used in addition to, not in place of, antibiotics.) Banamine® is an anti-inflammatory drug which helps reduce fever and damage to the lungs, and therefore may help sick calves get back on feed quicker. Providing calves with 1 gallon of warm water and electrolytes per 100 lbs. of body weight causes a stimulation of appetite and corrects the dehydration a calf usually suffers if sick for more than 24 hours. Vitamin B and Probiotics can be used to help stimulate appetite.

What else will help this calf? - Sick calves should be given excellent quality hay and grain. Grass and/or rye are also good feedstuffs as sick calves will often eat these when they will not eat anything else. Unless the weather is severe, calves often benefit from sunlight and being outside as opposed to being in a barn with poor ventilation.

Switching Antibiotics - Individual Calf - A sick calf's temperature, appetite, and attitude should be monitored after treatment. If the calf shows no improvement over 24-48 hours, consideration may be given to switching antibiotics.

Herd - A producer should consult a veterinarian when deciding whether or not to change antibiotics for the entire herd. In order for the veterinarian to make a good recommendation, he/she will need to know the case fatality rate (the number of treated calves which have died) and whether or not these animals died less than 48 hours or greater than 48 hours after treatment. For this reason, it is important to keep accurate treatment records.



Mass Medication - Mass Medication, also called Metaphylaxis, is the treatment upon arrival of an entire group of calves at high risk for respiratory disease. There is little data on the economics of using mass medication in Virginia stocker calves. In order for the process to be economical, a producer would need to expect greater than 30% of the calves will get sick. Some factors to consider when deciding to mass medicate are:

Season - Calves are more likely to get sick in the fall than any other time of the year.

Weaned vs. Unweaned - Calves that are not weaned when marketed are much more likely to get sick.

Weight - Calves weighing less than 450 lbs. are more likely to get sick and the expense of mass medication will be less as well, due to the smaller body weight.

Sex - Calves that must be castrated after marketing are more likely to contract BRDC.

Weather - Adverse weather probably plays the single largest role in the likelihood of a large number of calves becoming sick. It is often difficult, however, to predict weather patterns for the first two weeks after the calves are purchased.

History of Disease - The past history of the source of the calves as well as that of your own farm should be considered.

Goals of the Operation - If the producer's goal is to treat and lose as few cattle as possible, then mass medication may be the best, though perhaps not the most economical, method.

The Ongoing Battle with BRD

<http://www.cattlenetwork.com/e-newsletters/drovers-daily/The-ongoing-battle-with-BRD-273817521.html>

What is the Right Time of Day to Cut Hay?

Dennis W. Hancock, Extension Forage Agronomist, Crop and Soil Sciences Department, University of Georgia Cooperative Extension

Most folks in the Southeast learned how to make hay by watching and helping their father and grandfathers. Historically, most hay producers would start cutting hay about 10 a.m. By then, the dew was off, and it was just right to start cutting hay.



If one had grown up in the semi-arid or arid western US, they likely would relate a similar experience in learning how to make hay. However, their tale would differ in that they would likely have had to stay up late at night to cut hay. That's because in that region of the country, it is best to cut hay between dusk and about midnight in order maximize sugar content. So, why is there a difference between there and here in the Southeast? Which is the right time to cut hay?

Daily Variation in Sugar Content - To answer that question, we need to begin with a primer on a couple of subjects. First, the amount of sugar and starch in any forage crop will go through a daily cycle. Regardless of where the crop is grown, the plant creates carbohydrates during the daylight hours via the process of photosynthesis. The photosynthesis that occurs during the day is at a rate that is higher than the plant needs for growth and maintenance during the day. So, sugar content will generally be highest at dusk. Though starches and simple sugars accumulate during the day, a substantial amount of these carbohydrates are used up during the night for growth and maintenance (via the processes of respiration). Therefore, cutting the crop at night will likely maximize the sugar in the crop, at least at the time of cutting.

However, the difference in sugar content between late evening and early morning is relatively minor. As a percent of the dry matter in the crop, the difference is likely to be less than 1%. This difference is even more marginal in our warm season crops (e.g., bermudagrass, bahiagrass, sorghum-sudan, etc.). This is because of the higher concentration of fiber that exists in these forages relative to cool season crops (e.g., ryegrass, small grains, tall fescue, alfalfa, etc.).



Respiration Continues - Furthermore, respiration by the plant does not stop whenever the crop is cut. In fact, the moisture in the crop has to drop below 47% moisture for respiration to totally cease. In the

arid west, the crop moisture in the field can go from ~85% moisture to less than 47% moisture in a matter of just a few hours. In the humid east and especially here in the Southeast, it may take 2-3 times longer (or more) to drop to that same level. Given that the additional sugar content at early evening vs. early morning is relatively low and the period where respiration will continue to occur is long enough that it uses up most (if not all) of this marginal increase.

Weather Risk Trumps Timing- One must also remember that the greatest risk to hay curing and forage quality is rain damage. Weather prediction is, obviously, far from perfect in the Southeast. If the weatherman says there is no chance of rain in the 48 hour forecast, we have some reasonable amount of confidence that he'll be right more often than not. But, on that third day, and especially on those days beyond, we might as well flip a coin to judge what the weather will be.

Consider this scenario. One wakes up one morning and listens to the 5 day forecast. It predicts clear weather for the next 5 days. The producer decides to cut hay. If the producer cuts on the morning of day 1, he can be reasonably confident that (assuming the crop will dry in 2-3 days' time) he will be able to get it up without rain damage. If he decides to wait to cut until late evening on day 1 and assumes it is still going to require 2-3 days in the sun to dry, he may not be able to bale the hay until day 4. The chances are reasonably high that the weather forecast will change for days 3 and 4. So, the risk of rain damage is increased if one waits until the evening because the risk of rainfall on that extra day at the end is much greater than having that same drying day at the beginning.

Bottom Line - Consequently, the answer to the question of "When is the Right Time to Cut Hay?" is that it is usually best to start cutting hay as soon as possible during the day. As with any such generalization, there are always some exceptions (e.g., when cutting it for silage, green-chop, etc.) But, one should base their decision on this timing more on the potential impact of the weather rather than the minor diurnal variations in sugar content in our forages.

HAY DIRECTORY - A Hay Directory is maintained by the North Carolina Cooperative Extension Service for the Rockingham County and Guilford County area. This directory is intended as a service to both hay producers and buyers in the area. If you are in need of hay or would like to be added (or removed) from this list please call me at 1-800-666-3625 or 342-8235 and let me know your name, address & phone #, type of hay, number of bales, (square or round bales) and weight per bale.



Back Injuries and Production Agriculture - Ag Safety and Health

<https://www.extension.org/pages/63143/back-injuries-and-production-agriculture/print/#.VAhxXsVdV5w>

Farmers and ranchers are vulnerable to developing **back injuries** because of risk factors in the workplace such as awkward postures, whole-body vibration, repetitive motions, and forceful exertions, including heaving lifting. According to the Occupational Safety and Health Administration (OSHA), back injuries are one of the leading causes of disability in the workplace and cause human suffering and loss of productivity and strain the compensation system.

The spine is composed of vertebrae, bony blocks stacked on top of each other to support the trunk and head, allow flexibility, and protect the spinal cord. Discs act as cushions between vertebrae and have strong outer shells and jelly-like middles. The muscles located on the back, abdomen, and buttocks provide stability and help maintain proper posture.

A **back injury** can develop gradually from a repetitive activity or suddenly from a single traumatic event, such as improperly lifting a load or lifting a load that is too heavy. Back impairments can range from mild and temporary to incapacitating and permanent. Many acute back injuries occur when doing activities, such as the following, that exceed the capacity of muscles, tendons, or discs:

- | | |
|---|--|
| Reaching while lifting or lifting with bad posture | - Engaging in unaccustomed work |
| Engaging in repetitive lifting with inadequate rest | - Bending or twisting while lifting |
| Lifting objects that are too heavy | - Lifting with improper foot placement |

Prolonged driving of vehicles that cause whole-body vibration, such as tractors or trucks, can be a risk factor for developing a back impairment. Whole-body vibration can aggravate existing back injuries and increase pain levels.

Typical treatment for a **back injury** can include physical therapy and medication, but more complex treatments may be necessary for a debilitating back impairment. Therapy usually involves stretching exercises, walking, and normal activity, provided that activity is not excessively strenuous. Consult a health care professional for specific treatment recommendations.

Strategies to Prevent Back Injuries - A back impairment can happen in any type of home, work, or recreational environment. Basic injury-prevention strategies include staying healthy and fit, maintaining good posture, and getting regular exercise. According to WorkSafeBC, using the following strategies when bending, lifting, and carrying objects can help reduce the risk of a **back impairment**:

Place your feet apart to improve your balance and center your body weight. Maintain a good grip on the object and use appropriate gloves when needed. Keep a straight back when possible and avoid awkward postures. Hold the object as close to your body as possible. Use smooth, slow motions to lift and carry a load. Never twist your back or waist, but rather pivot with your feet if you need to turn. When you have the option, push rather than pull a load. Prior to lifting, make sure that there are no obstructions in your intended path. Get help with heavy, awkward loads.

Responding to Back Injuries - If you are the manager at a farm or ranch and there is a pattern of back injuries related to a specific task, you should examine the task and complete a job safety analysis (JSA) to identify hazards associated with the task and develop controls to reduce the risk of injury for workers.

Additional Recommendations - When possible, rely on machinery or equipment such as pushcarts, hand trucks, wheelbarrows, or hoists to move objects. If you are taking medication for a back injury, check prescriptions and any over-the-counter medications to ensure that medication will not impact your ability to safely operate equipment.

Work with a partner to lift objects that are heavy or bulky. Team lifting should be done by two people of similar size who can communicate and work together. Rotate employees between lifting and non-lifting tasks.

Resource - Summarized by:Linda M. Fetzer, Pennsylvania State University – jmf8@psu.edu

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Sources Back orders and injuries. (n.d.) OSHA Technical Manual. Occupational Safety and Health Administration. Retrieved from http://www.osha.gov/dts/osta/otm/otm_vii/otm_vii_1.html.

Back talk: An owner's manual for backs. (2010) Workers Compensation Board of British Columbia. Retrieved from http://www.worksafebc.com/publications/health_and_safety/by_topic/assets/pdf/back_talk.pdf.

Jepsen, D., Wonacott, M., Ling, P. & Bean, T. (2006) Preventing lifting overexertion injuries. Ohio State University Extension Tailgate Safety Training for Landscaping and Horticultural Services. Retrieved from http://ohioline.osu.edu/aex-fact/192/pdf/0192_1_44.pdf.

Sesto, M. (2002) Chronic musculoskeletal disorders in agriculture for partners in agricultural health. University of Wisconsin-Madison: Department of Industrial Engineering. Retrieved from <http://woreh.org/files/AgHealth/musc.pdf>.

Whole-body vibration in agriculture. (2009) Health and Safety Executive. Retrieved from <http://www.hse.gov.uk/pubns/ais20.pdf>.

NC Agricultural Cost-Share Program - The major cause of water quality problems in North Carolina and in much of the United States is nonpoint source pollution. In many places, damage to our water resources comes from soil erosion, excessive fertilizer use, animal waste contamination, and improper use of agricultural chemicals. The North Carolina Agriculture Cost Share Program helps address nonpoint pollution by providing technical and financial resources.

Who is Eligible? If you are a landowner or renter of an existing agricultural operation that has been operating for more than three years, you are eligible to participate in the North Carolina Agriculture Cost Share Program.

How does the program work? Submit an application to your local soil and water conservation district. The applications are ranked based on resource concerns identified in the county. Applicants can be reimbursed up to 75 percent of a predetermined average cost for each BMP installed. The applicant is responsible for 25 percent of the costs. This may include the use of existing material and labor. There are some cost share and acreage restrictions depending on the BMPs used, the type of operation involved, or policy set by the local soil and water conservation district or the N.C. Soil and Water Conservation Commission. Cost share incentive payments are also available to encourage the use of certain agronomic management practices.

Applications are being taken now at the Rockingham County Soil & Water Conservation District office
Call 336-342-0460 or visit the office at the Rockingham County Agricultural Center.



DON'T FORGET - Soil Testing To Start Charging A Fee During Peak Season

- NCDA&CS Agronomic Division

- Peak-season Soil Testing Fee

, a \$4 fee will be charged for all soil samples processed by the NCDA&CS Agronomic Division during its busiest season: December through March. There will still be no fee April through November.



SO GET YOUR SOIL SAMPLES TAKEN & SENT IN!

Beef Cattle E-Mail List – If you would like to be added to a Beef Cattle E-mail list for Rockingham or Guilford Counties, please send me an E-mail at: ben_chase@ncsu.edu and put in the body of the message your Name, U.S Mailing Address & Phone #, & the Email mailing list you wish to be on. This will make it easier, quicker and cheaper to get information to you.



Be Aware of Prussic Acid - Livestock producers who are grazing sorghum, sudan sorghum hybrids or Johnson grass should take some precautions to avoid problems from prussic acid poisoning.

Prussic acid, or Hydrocyanic acid, is most often produced when the sorghum, sorghum-sudan crosses, Johnson grass, or wild cherry are eaten by cattle, sheep, horses or goats. Under normal conditions prussic acid is not a major problem, however, conditions that interfere with normal growth, such as drought, frost, heavy trampling or physical damage, will cause an increase in the amount of free prussic acid in the plant, therefore increasing the chances for toxicity upon ingestion. The poisoning can occur under pasture conditions when animals are grazing young seedlings, young regrowth shoots, stunted growth or frosted plants. Heavy nitrate fertilization followed by abundant rainfall may also increase prussic acid level of the plant. Fatal prussic acid poisoning may also occur from the ingestion of wilted leaves from wild cherry.

The prussic acid interferes with normal oxygen exchange and can be fatal. Animals literally die from lack of oxygen. The first sign of a problem may be dead animals. The typical symptoms of prussic acid poisoning are nervousness, abnormal breathing, convulsions or trembling muscles, blue coloration of the lining of the mouth and extreme pupil dilation. Animals

treated quickly in early stages can be saved by intravenous injection with a combination of sodium nitrate and sodium thiosulfate or methylene blue.

The following points should be kept in mind: Prussic acid poisoning is not cumulative and upon removal from the forage source animals not showing evidence of being poisoned will likely not be adversely affected. Normally, grazing of the target plants can resume 4-6 days after a killing frost. Since frosts may not occur uniformly within the county, it is suggested that animals be taken off the target crops until it is certain that the plants have been frozen to below 26 degrees at least once.

Do not graze for 2 weeks after a non-killing frost. Do not graze wilted plants or young plant shoots (tillers).

Do not graze at night when frost is likely. Graze these type plants only when they are at least 15 inches tall.

Don't graze plants during or shortly after drought when growth is reduced and plant has been stressed.

Prussic acid poisoning is not a problem when crops are cured for hay or ensiled for more than 4-6 weeks.

Don't allow access to wild cherry leaves, wilted or not! (Alfalfa and White Clover can also produce Prussic Acid)



FORAGE TIPS: September-October – With cooler temperatures coming and late summer/early fall rains coming this will jump start fall growth of cool season pastures. *Scout pastures, identify perennial weeds and woody brush, and determine appropriate method of control. *Lime and fertilize pastures/hayfields based on soil test results. *Closely monitor livestock and do not over graze. This allows plants to send reserves to lower stems and roots. *To get maximum use of available grass, utilize cross fencing. This will stretch out forage and decrease wastage. *Evaluate your current situation and consider overseeding or planting for fall & winter grazing with rye, ryegrass, etc. in late September. Small grains can provide grazing from December through May *With the high price of fertilizer it is very important to take soil samples for fall plantings. Come by and pick up your free soil sample boxes and sheets. *Fertilize and lime cool season grasses. Apply lime to pastures with pH below 5.8., if proper pH is not maintained, fertilizer may not be utilized by the plant. *Plant cool season grasses (fescue, orchardgrass, clovers, etc.) as late as October 25. *Finish grazing warm season grasses before grazing cool season. *Apply nitrogen to warm-season grasses after each cutting (or 4 to 6 weeks) *Graze bermudagrass to a 2-4 inch stubble and harvest excess every 4-6 weeks. *Be aware of potential of Nitrate & Prussic Acid poisoning from animals if grazing FLOODED, stunted, highly fertilized summer annuals. *Keep good forage records. * If on fields, DRAG PASTURES TO BREAK UP/Spread MANURE PILES (This helps with fertility and flies). - Rotate/Clip pastures as needed. *Be cautious of combustion - Hay Fires - Hay in round bales should not contain no more than 18% moisture and square bales no more than 20%.



CATTLE REMINDERS: SEPTEMBER – OCTOBER- ALL CATTLE: *Provide (and check) clean fresh water. Cull animals that need to be culled. *Monitor Body Condition Scores. *Continue parasite control. *Provide High Magnesium mineral supplement. *Deworm & treat for grubs. *Monitor for health problems. *Check cattle regularly*. FALL CALVES: *Maintain condition on cows; graze cows on lower quality pasture. *Prepare for herd sire selection & vaccinate herd prior to breeding, & fertility check bulls. *Separate herd into management groups (first calf heifers, mature cows, open heifers). *Start heifer replacements on development program. *Vaccinate replacement heifers. *Provide Magnesium mineral supplement. Cows should consume 1 oz. of mgo/hd/day *Wear & sale calves. *Prepare for calving season, keeping calving area clean *Observe frequently once calving starts. Make sure calf consumes colostrum within 4 hours of birth. ID, castrate, & dehorn calves. Look at giving newborn calves Vitamin A & D injections. *Make sure you have the bull power for breeding season. *Make sure cows are getting enough energy after calving. SPRING CALVES: *Evaluate bulls on calf performance.*Deworm & Vaccinate calves.*Select replacement heifers and feed to gain 1.5-1.75 lbs per day. *Wear & watch markets to market calves. *Look for unsound cows that should be culled and identify and cull bulls that have sired groups of calves that are below average performance.*Make replacement heifer selections.*Pregnancy check cows. *Body condition score cows at weaning and separate thin cows.*Prepare to wean calves.



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