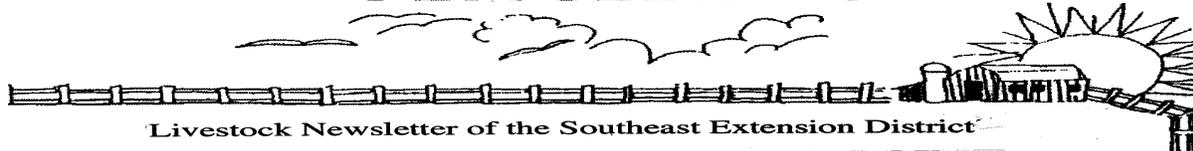


FENCELINES



Livestock Newsletter of the Southeast Extension District

October – November – December 2012

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WELCOME ABBY!!

Hello All,
I am Abby Dilley and I am very excited to be your new Livestock and Forage Agent. I will be serving both Pender County and Onslow County. I was born and raised in south eastern West Virginia on a commercial cow/calf operation. Growing up I was very involved in 4-H and FFA showing cattle and horses. In May of 2011 I graduated with my bachelors in Animal and Nutritional Science from West Virginia University. While at WVU I participated in colligate 4-H, colligate Farm Bureau, 2010 colligate dairy judging team, and held the presidential seat of WVU Block and Bridle club. I am hopeful that I will have the ability to meet each and every one of you.

DETERMINING YOUR HERD'S BODY CONDITION SCORE

Melissa E. Huffman, Extension Agent, Onslow County

As the winter months approach and pasture growth declines, it is very important that you monitor the body condition score (BCS) of your cattle. Cattle should not be allowed to become too thin or too fat. The body condition not only affects the nutritional status of your cattle, but can also affect rebreeding after calving, low weaning rates, and pregnancy toxemia.

Determining body condition of a cow can be done visually based on a scoring system ranging from 1 to 9. Producers should aim to have most cows in the range of scores from 5 to 7. BCS should be determined every two months during the winter, and more frequently during extremely cold or damp conditions.

Depending on the cow's frame, there is usually about a 50 to 75 pound range between each condition score. Recording BCS will help you to determine when adjustments need to be made to your feeding program.

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Some ways to improve feeding efficiency in order to improve the body condition score include early weaning of calves, providing shelter from environmental elements, and prevention of muddy conditions.

The good thing about the body condition scoring system is that it is simple and requires no equipment, except maybe a pen and notepad! So I encourage you to get out and walk through your cows, while writing down the estimated average for the whole herd, then identifying the higher and lower scoring cows. Remember practice makes perfect!

BODY CONDITION SCORING CHART

BCS 1	Extremely thin.	Extremely thin and weak, near death.
BCS 2	Extremely thin.	Extremely thin but not weak.
BCS 3	Very thin.	All ribs visible. Spinous processes prominent and very sharp. No fat cover felt with some muscle wasting.
BCS 4	Slightly thin.	Most ribs visible. Spinous processes sharp. Individual processes can be easily felt. Slight fat cover can be felt over the eye muscle.
BCS 5	Moderate.	Spinous processes felt but are smooth. Some fat cover felt over eye muscle.
BCS 6	Good.	Smooth look with ribs not very visible. Spinous processes smooth and round. Individual processes very smooth, felt with considerable pressure. Significant fat cover felt over eye muscle.
BCS 7	Fat.	Ribs not visible, spinous process felt under firm pressure. Considerable fat felt over eye muscle.
BCS 8	Obese.	Animal is very fat with spinous processes difficult to feel. Ribs can not be felt. Animal has blocky obese appearance.
BCS 9	Extremely obese.	Similar to an eight but more exaggerated. Animal has deep patchy fat over entire body.

SCOURS IN SMALL RUMINANTS

*Eve H. Honeycutt, Livestock Agent, Lenoir and Greene Counties.
Adapted from an original article by Susan Schoenian, University of Maryland Sheep and Goat Specialist*



Diarrhea in young (neonatal) lambs and kids

Despite improvements in management practices and prevention and treatment strategies, diarrhea is still the most common and costly disease affecting neonatal small ruminants. Diarrhea in lambs and goats is a complex, multi-factorial disease involving the animal, the environment, nutrition, and infectious agents. The four major causes of diarrhea in lambs and kids during the first month of life are *E. Coli*, rotavirus, *Cryposporidium* sp. and *Salmonella* sp. *E. coli* scours are most common.

E. Coli

E. coli scours is an opportunistic disease associated with sloppy environmental conditions and poor sanitation. It is seen in lambs and kids less than 10 days of age, but is most common at 1 to 4 days of age. It usually presents itself as an outbreak in lambs and kids between 12 and 48 hours of age. It is also called "watery mouth," because affected lambs salivate and have a cold mouth. Fluid therapy is the mainstay of therapy.

Antibiotics are used for both treatment and prevention of *E. coli* scours in lambs. The use of neomycin in lambs that appear normal may stop the progression of the outbreak. Adequate ingestion of colostrum by newborns decreases the incidence of the disease.

Rotavirus

Lambs and kids are infected with a group of B rotaviruses, whereas most other animals and humans are infected with group A rotoviruses. Rotavirus generally causes diarrhea in lambs and kids at 2 to 14 days of age. Young animals become very depressed and dehydrated.

Rotavirus is treated with supportive care. Viruses tend to be less a cause of diarrhea in lambs and kids than calves.

Cryptosporidium

Cryptosporidium parvum is a protozoa that can cause diarrhea similar to that of rotavirus infection. *Cryptosporidia* can cause diarrhea in lambs and kids 5 to 10 days of age. Affected animals are often active, alert, and nursing. The diarrhea is usually very liquid and yellow.

No consistently effective treatment for cryptosporidiosis in ruminants has been identified. Ammonia and formalin seem to be most effective at removing *Cryptosporidium* from the environment. The best control of cryptosporidiosis comes from lambs and kids getting adequate immunity through colostrum soon after birth.

Salmonella

The bacteria *Salmonella* has thousands of serotypes and all can potentially cause diarrhea in animals. *Salmonella* can cause diarrhea in lambs and kids of any age. Animals less than 1 week of age are more likely to die without clinical signs, whereas animals older than 1 week are more likely to have diarrhea. *Salmonella* also causes outbreaks of diarrhea in late gestation and is frequently associated with abortion. Bleach is an effective disinfectant to use during an outbreak. Vaccine efficacy is questionable, and to date vaccination has not been thoroughly evaluated in sheep and goats.

Nutritional

Infectious agents are not the only cause of diarrhea in neonates. Nutritional problems can result in diarrhea. Nutritional diarrhea is most common in orphaned animals as a result of poor quality milk replacers, mixing errors, and overfeeding. Consumption of lush pasture or high-energy diets can also result in diarrhea in young lambs and kids. A scouring lamb or kid loses large amounts of fluids and electrolytes, such as sodium and chlorine.

Usually the cause of death in scouring lambs and kids is dehydration and acidosis, or increased body acidity. Whatever the microbial cause of scours, the most effective treatment for a scouring lamb or kid is rehydration by administering fluids.

HANDLING SWINE SAFELY

*Margaret Bell Extension Agent, Craven and Jones Counties
Adapted from "Safe Animal Handling, Pork Checkoff and Pork Information Gateway Fact Sheet."*

There are many opportunities for workers to get hurt while handling swine. This could happen at any age and stage of the pig, when the worker is moving pigs, unloading / loading pigs, and processing pigs. In this article, we will discuss different responsibilities of workers and how to avoid being injured while performing their duties.

General

When pigs are being transported, they become very stressed. They should be moved as quickly, quietly, and efficiently as possible. However, you don't want to move the pigs too fast, as to cause injury to either the pigs or the handler. Pigs have a range of vision that spans almost 360 degrees, so it is a good idea to have chutes and ramps with solid sidewalls so they will not get distracted. In addition, pigs have a tendency to move to well-lit areas from dimmer areas. Many producers will put spotlights onto a ramp so pigs will move more easily. Always move pigs in a manageable size group. For example, when you are moving pigs into the nursery, do not move more than 20 pigs at the time. When entering the finishing barn, do not move more than 10 pigs at the time. When you are leaving the finishing barn, do not move more than five pigs at the time (think about how big they are now!). When you are moving breeding stock, do not move more than five pigs at the time. Most of the injuries on hog farms happen when handlers are interacting with pigs. There are several items to keep in mind to avoid injuries. You should know the characteristics of the pigs hearing and vision, maintain clean and organized houses, and when you are around the pigs, stay calm and touch them gently. Don't move quickly or expose the pigs to loud noises, clutter alleyways, or overcrowd chutes / pens.

Farrowing

In the farrowing barn, workers must be careful with various hazards as well. These include power washing, electrocution, fires, and stressed animals. Always pay close attention to plugs, cords, and electrical outlets. Employees should receive proper training on how to safely work with electrical fixtures. Make sure to always replace temporary cords with permanent cords. It is also important if you wash sows to be very careful. Be aware of where you place yourself in relation to the animal.

Processing

During processing, there are many potential hazards that could affect the well-being of the workers. These include needle sticks, cuts, punctures, etc. while giving shots, clipping teeth, cutting tails, ear notching, castrating, and tattooing. Ensure workers are taking ample breaks to reduce fatigue as well as properly handling and holding the animals.

Injecting Pigs

Many times workers will injure themselves when they are injecting sows in crates by getting their hands caught between the crate and the sow. Immediately report any accidental injection or antibiotic injections to the supervisor. When injecting pigs, try to keep your hands in a neutral position, always read labels, and only use products the way they are meant to be used. Don't carry needles in your pockets or put your hands between a sow and the crate.

Breeding

Many injuries occur because of boars. Injuries to the boar could occur do to slippery floors. The boar could also become aggressive if other boars are around or if he has trouble mounting the sow. When workers are breeding animals, they should always use sorting panels, be able to get out of a specific area quickly, not be in between the boar and the sow, and make sure the boar's tusks are removed. When removing dead animals, try to get them out as soon as possible. The longer you wait, the harder it is to move them. Do not pull or strain your muscles pulling a dead pig out. It is helpful to use a hog cart or a hand truck before using only human assistance. Keep pens clean and dry when breeding pigs and always watch out for the boar. Don't sit down to collect semen or stand too close to the boar.

Weaning and Nursery

Always keep animals in a small, manageable group and get assistance when possible to move or lift animals. Try not to lift pigs alone and if you have to then position yourself parallel to the pig you're lifting. Always use good lifting techniques as to not injure your back.

Finisher

Make sure you properly load and unload animals in the finishing house, as they could be nearing 300 pounds at this stage of life. Always use sorting panels and don't try to stop pigs from getting past you with your knees. Try to remain calm and only load small groups at one time. Pigs are harder to handle, the more stressed they are.

PLANNING FOR COOL WEATHER GRAZING

Eileen Coite, Livestock Agent, Wayne County

Fall is finally closing in on us, days are cooling off and getting shorter, and it is time to begin planning for cool season grazing. In eastern NC, mid September to October is the best time for us to plant fall forage crops, including annual grasses such as oats, rye and ryegrass, and perennials such as tall fescue.

Lets take a more detailed look at planting, establishing, and maintaining specific cool season grasses in our pastures: Rye is most widely used for overseeding in both pastures and hay fields. Rye is classified a small grain, along with oats, wheat, and barley. These grasses will produce about 1500-2500 pounds of forage between early fall and April if they are planted early and fertilized correctly. After April, another 1-2000 pounds will usually be produced before temperatures get too warm. All small grains are high in quality, being 70-80% digestible and 15-20% crude protein when grazed and kept in a vegetative stage. Intake will also be highest at this stage due to the high quality.

Italian Ryegrass, or annual ryegrass is another winter annual often chosen for overseeding. Ryegrass generally yields 2-4 tons per acre, with more than 50% of this growth being in April and May. Ryegrass is often less desirable for

overseeding hay fields, because it does persist longer than rye, and will shade out bermudagrass growth in the early spring. Ryegrass works well for mixing in a winter pasture, such as a rye/ryegrass mix. Nutritionally, ryegrass is very high quality, being 77-82% digestible and 14-20% crude protein, again if grazed and maintained in the leafy, vegetative stage of maturity. Fertilization of small grains and ryegrass are similar, on average requiring 500-600 pounds of a complete fertilizer (10-10-10) at planting, and making additional applications of 60-80 pounds nitrogen per acre on sandy soils when plants are 2-3 inches tall (usually in November), and topdressing again with 50 pounds/acre nitrogen in mid February.

Tall fescue is often the perennial chosen in eastern pastures on all soils except very dry sands. Fescue is a bunch type grass, which spreads very slowly by rhizomes, or below ground stems. Peak production months of fescue are March-May, and September-November. Fescue will grow in summer, but most often becomes dormant after 14-21 days of no rain. Tall fescue will yield from 3-5 tons per acre and is very nutritious, being 70-80% digestible when immature and vegetative, but declines to 55-60% when it becomes more mature and a seedhead forms. Fertilization of fescue should be 600 pounds/acre of a complete fertilizer at establishment, with an additional 200 pounds/acre in split applications on established fields. Split application should be done during February-March, and again in August-September. Additional phosphorous and potassium may also be needed, and a routine soil test will reveal this. Reduction of 25% per acre should be done if grazed throughout the growing season, due to nutrient application from livestock. Fescue pastures are often combined with clover to form a high quality grass-legume pasture mix. Less nitrogen will be required when combined in this sort of mix, due to nitrogen supplied by the legume. A concern of fescue is the endophyte fungus *Acremonium conophialum*, found in more than 90% of Kentucky 31 pastures across the state. The endophyte is known to cause animal health disorders such as poor animal performance and growth, increased body temperature and respiration rate, and shaggy, dull hair coats in the summer. Other concerns are with reproduction in broodmares, specifically causing thickened and/or retained placentas, prolonged gestations, stillbirths,

and abortions. There are endophyte free fescue varieties, as well as endophyte “friendly” ones. Having the endophyte present in the plant is advantageous to plant growth and persistence, so endophyte friendly varieties such as “Max Q” are becoming the fescue of choice. Fungus free or friendly cultivars are recommended for lactating dairy cows and pregnant mares.

One last and very important consideration, especially with the high cost of fertilizer is incorporating legumes into fall pastures. For example, adding clover to a pasture will not only increase the palatability and protein content of the forage, it will provide up to an additional 150 pounds of nitrogen for the grass. The best choice for eastern North Carolina is probably ladino or white clover, a perennial that will last about three years. White clover will grow most places and on most soils, with the exception of very deep, dry sand. It will grow some each month, but often yields 50% or more from March to June. Clover and other legumes will require inoculation before planting, which is a process where seed is mixed with bacteria, that helps the plant grow and develop better than it would normally. Special inoculants are made for different types of legumes, so it’s important to use the correct type and amount. Call the Extension office and we can assist you with selecting and using the right inoculant for whichever legume you select. Legumes also require additional phosphorous and potassium over a grass pasture, so make sure you ask about these needs and definitely take a soil sample to discover the pH and other soil characteristics of your field.

Any of the above mentioned cool season forages will provide quality grazing throughout the winter months in eastern North Carolina. As always, having a current soil test report will help in preparing pastures for growth and establishment throughout the year. For more information on soil testing or winter forage selection, planting, and management, call your local Extension office.

The use of brand names in this article does not imply endorsement of the products or services named or criticism of similar ones not mentioned.

Forage Management Tips

OCTOBER

- Finish using summer grasses before grazing the cool season ones.
- Overseed bermudagrass and other warm season grasses with winter annuals such as rye if you haven't already done so.
- Sample soils to be overseeded or planted next spring so the limestone can be applied early enough to react; two to four months are required for lime to effectively neutralize soil acidity.

NOVEMBER

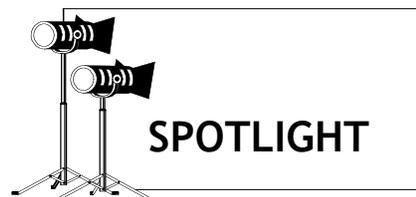
- To improve feeding efficiency, test forages before winter feeding begins.
- As winter feeding begins, separate the herd into lactating and dry cows so the best quality pastures and hay can be fed to the cows with nursing calves.
- Do not graze fall-planted perennial pastures, such as tall fescue/ladino clover, until growth reaches 6 to 8 inches.
- Winter annual pastures that were planted early (September) may be responsive to an additional application of nitrogen (30 to 50 lbs per acre).
- Bermudagrass should have 3 to 4 inches of growth to serve as an insulation against winter damage.

DECEMBER

- Ovoid overgrazing by feeding hay on pasture or restricting acres available to animals.
- Feed hay stored outside before using hay that is stored inside.

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the North Carolina Cooperative Extension 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 and examine a current product label before applying any chemical. For assistance, contact an agent of the North Carolina Cooperative Extension in your county.

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SSDRIP coming to an end!!

Funding for Onslow's Septic System Database, Repair, and Information Program (SSDRIP) ends in January 2013. The money for the program comes from the Clean Water Management Trust Fund. This program provided a \$50 rebate to 4,740 Onslow residents who had their septic tank pumped, for a total of \$237,000 in assistance.

The rebate funding was depleted, so no more rebates are available; however, funding for septic system repairs is still available. People who suspect that they have a problem with their septic system should contact Onslow County Environmental Health (938-5851), to see if a repair is needed. If yes, residents can then contact Matthew Stuart at Onslow County Planning (989-3081) to apply for assistance from SSDRIP.

Program eligibility follows HUD guidelines, and is based on family size and income. Applicants may qualify for either a grant (20% of loan amount forgiven per year) or a low-interest loan. **No applications will be accepted after October 31, 2012.** If you are having problems with your septic system, don't miss out on this opportunity for assistance with repairs!

Contact Diana Rashash at NC Cooperative Extension – Onslow County (455-5873 or diana_rashash@ncsu.edu) for information on septic system care and maintenance.

