Horse Blog
Check out the NC Horse Blog with articles on management, nutrition and forages, health care and diseases, reproduction/breeding/foaling, and other topics every week. The blog can be found at http://nchorse.blogspot.com.

GIPSA Meeting
will be on Wednesday, March 14th at 10 am at the Robeson County Extension Center in Lumberton. Mr. Elkin Parker, USDA, will give an update on USDA’s Grain Inspection Packers and Stockyards Administration (GIPSA).

Clinton Feeder Calf Sale
will be on March, 20th at 7 pm at the Sampson County Livestock Facility. Cattle will be graded on March 20th between 7:30 am and 4 pm. For more information, call Paul Gonzalez at Sampson Extension at (910) 592-7161.

Richmond Co. Wild Foods Cookoff
will be held on Tuesday, March 20th at the First Presbyterian Church located at 133 W. Ballard St. across from the Junior High School in Ellerbe. Dish registration will start at 6 pm. Robert Siler, retired biologist and bird dog enthusiast, will speak on “Adventures Chasing Gamebirds Across America”. Robert regularly loads up his dogs and travels to far corners of the US to chase gamebirds. This will be an exciting and educational presentation. Mark your calendar so you won’t forget to cook a delicious dish or come join the tasting party for only $5 per person. To register a dish, call 910-997-8255 or email Tiff_Conrad@ncsu.edu if you would like to receive a flier with categories and rules.

Pesticide Classes in Bladen County
Classes will be held at the Extension Office and start at 5pm.
• V Credits on March 12 or April 23
• X credits on March 19 or April 30

Pesticide Classes in Cumberland County
♦ V Credit on March 20, 6 pm
♦ Pesticide License School & Exam—March 27 & 28
Contact Colby Lambert for more details.

Southeastern Goat Field Day
will be on Saturday, April 28th from 2 - 4 pm at the Evans’ Goat Farm located at 272 Pinewood Road in Lumberton. The program includes recordkeeping, health care, fecal egg counts, forages, feeding and more. Call 910-671-3276 to register by April 23rd.

Livestock Judging & Skill-A-Thon
Practices are being held every Tuesday from 5:30-7:30. For more information, contact Mandy Harris at 910-321-6862 or mandy_harris@ncsu.edu

Contact Us
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301 East Mountain Drive
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(910) 321-6883 Fax
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Mandy Harris,
Extension Agent, Livestock
mandy_harris@ncsu.edu

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.
Animal Waste Management

Initial Animal Waste Certification Training
There will be a 10 hour initial training class for type A or B license on April 18 and 19, 2012 at the Bladen County Extension Office starting at 10 am. Call (910) 862-4591 to register by April 5th. The cost for the class and manual is $35 or $5 for just the class. The 2012 exams are June 14th, September 13th, and November 8th.

Preparing for a DWQ Inspection
At the last Bladen County Livestock Association meeting, John College, Division of Soil and Water Conservation, discussed the items that producers should have ready for a Division of Water Quality inspection. John is available to help producers prepare before a DWQ inspection by doing a volunteer Operation Review at a growers request. He covers Bladen, Cumberland, Harnett, Hoke, Moore, Richmond, Robeson, Sampson & Scotland Counties. He can be reached at 910-796-7399 if you need more information. Martin Mclawhorn covers Johnston county and his number is 252-948-3903. He recommended having these as tabs in a notebook that the inspector could flip through during the inspection.

Hay Directories are below for people selling hay or looking for hay to buy. It is free to list your hay.

1. North Carolina Department of Agriculture’s Hay Alert is at http://www.agr.state.nc.us/hayalert/. Producers can call the Hay Alert at 1-866-506-6222. You can sign up to list your hay on-line.
2. The Southeastern NC Hay Directory is available at http://onslow.ces.ncsu.edu/files/library/67/HayDirectory.pdf. Call your Extension Agent to learn how to include your farm on the list.

Forage Management Tips From Production and Utilization of Pastures and Forages in North Carolina

March
• Fertilize cool-season grasses to increase production.
• Dig weed free bermudagrass sprigs and plant them before growth begins. Consider using a herbicide.
• Control winter annual weeds in dormant bermudagrass with herbicides, burning or grazing pressure.
• Watch for grass tetany as rapid grass growth and cool, wet weather prevails-supplement with high mag mineral.
• Scatter manure from areas where animals congregate.

April
• Fertilize cool-season grasses if not already done.
• Watch for symptoms of grass tetany.
• Fertilize warm-season grasses when dormancy breaks.
• Establish hybrid bermudagrass unless irrigation is available.
• Plant crabgrass and switchgrass. Plant seeded varieties of bermudagrass at the end of the month.
• Graze cool season grasses down to 2-4”. Harvest for hay if growth is too rapid to maintain grazing pressure.
• Completely graze or harvest winter annuals before grazing other pastures.
With any livestock, feed costs are the largest expense of any operation, large or small. To aid in these costs, it is important to grow a quality forage product. If the forage an animal is getting is quality, the producer can cut back on feeding concentrates and supplements. The best way to cut costs is to have an effective pasture management system. Having good soil health and fertility provides a good environment for forages and can be achieved by using manure. Manure provides nutrients and organic matter to the soil. This promotes improved forage growth and soil structure. It is also important to choose appropriate grasses to plant.

Pasture rotation is a common and important management practice. It allows for optimum plant growth by grazing grasses at the correct heights and providing rest and time for re-growth. Rotation also reduces selective grazing, animal trampling, and waste. A good rule of thumb is to graze the area no closer than two inches, then move the animals to the next area. It is also recommended to give fields a 30-35 day recovery period before grazing it again. For effective rotational grazing, the producer needs to be aware of the acres available and the number of animals appropriate for the number of acres. Knowing how much pasture you will need depends on several factors including rainfall, quality of the pasture, availability of other pastures to rotate with, the length of the grazing season, whether the pastures are primary or secondary feed sources, etc. Like having too little pasture, too much pasture can also be a problem. When pastures go through periods of heavy growth or the forage gets ahead of the animals, they can be harvested and the forage stored or stockpiled for winter use or supplemental feed or the pasture should be mowed to clip weeds and over-ripe grass to provide fresh grazing.

Another good idea for managing pastures is to have sacrifice areas. These are specific areas for feeding, watering, exercise, and relaxation. Sacrifice areas are ideal for times when pastures are not accessible because of slow or no growth, flooding, or any other reason. Typically, sacrifice areas have very little to no vegetation and manure should not be spread in these areas. They are areas for animal activities to protect pastures. When managing a sacrifice area it is also important to consider runoff to prevent water pollution.

When pastures get low and feeding hay is necessary, quality hay is important. When determining if forages are quality, there are several methods. While it may not be the most accurate method, visual appraisal is important. This includes sight, smell, and feel. Observing color, leaf content, stem texture, maturity, weeds, molds, and seeing if animals find it palatable are all good ways to appraise forages. It is also important to conduct several forage tests such as: dry matter, crude protein, acid detergent fiber, neutral detergent fiber, calcium, and phosphorous.

Dry matter is probably the most important of these tests. All animals’ requirements are decided on a dry matter basis. Knowing the dry matter of forages makes it possible to compare different forages. Dry matter is also extremely important to know if the forage will be baled or ensiled. It will give clues to how the forage will preserve in these conditions.

There are many components to consider when managing pastures for ruminants. These ideas are a broad overview. Research and planning should go into any pasture management operation and it is always a good idea to get professional help with any questions or concerns. For more information or additional questions, contact your local Extension agent.
Since the first National Beef Quality Audit the incidence of injection site lesions has decreased from 22.3% in 1991 to less than 3% in 2000. The logical conclusion for this decrease is that producers are increasingly giving injections in front of the shoulder rather than in the round or loin. There are still problems associated with injection site blemishes, and therefore still room for improvement in our management that can result in fewer defects in beef. One goal stated in the 2005 audit is to eliminate injection blemishes from the front of the chuck roll, the muscle group on the front of the shoulder. So while injection site lesions from the higher value cuts have dropped, we still see blemishes in this lower-value cut.

When administering medication to cattle, it’s critical to remember two important Beef Quality Assurance guidelines: always use the subcutaneous (SQ) route of administration if the product label allows for SQ, and administer all medications forward of the shoulder. Below is the Injection Triangle diagram. All intramuscular (IM) injections should be given in the forward triangle only, while SQ can be administered anywhere in the entire area. There is also a drawing of the “tenting” technique for giving a SQ injection. This consists of grasping the skin and lifting up a fold, or “tent” and injecting into the opening created under the skin. Some folks prefer to use the “non-tenting” technique where the needle tip is inserted under the skin and then the skin is lifted up with the needle. Certainly the “non-tenting” technique is safer for the person giving the medication. If you plan to use the tenting technique, be sure cattle are properly restrained to protect the operator, the animal and others.

It is also very important to use the right needle for the job. The size and length of the needle is important to ensure the entire dose gets into the animal with the least amount of tissue damage. The gauge is very important; a 14-gauge needle is not recommended due to increased leakage of the product and tissue damage. A 14-gauge needle is twice the diameter of a 16-gauge needle and should only be used for intravenous (IV) injections in larger cattle. Needle length is important, too. For SQ injections a ½ to ¾ inch needle is recommended. A one to 1 ½ inch needle can be used for IM injections. You should consider the size of the animal and the thickness of the material to be injected when selecting a needle, as well. This table from a BQA Trainer Manual has recommended sizes based on route, product and animal size.

<table>
<thead>
<tr>
<th>Injectable Viscosity</th>
<th>SQ (1/2 to 3/4 inch needle)</th>
<th>IV (1 1/2 inch needle)</th>
<th>IM (1 to 1 1/2 inch needle)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cattle Weight</td>
<td>Cattle Weight</td>
<td>Cattle Weight</td>
</tr>
<tr>
<td>Thin: Saline</td>
<td>&lt;300</td>
<td>300-700</td>
<td>&gt;700</td>
</tr>
<tr>
<td>18 gauge</td>
<td>18-16 gauge</td>
<td>16 gauge</td>
<td>18-16 gauge</td>
</tr>
<tr>
<td></td>
<td>18-16 gauge</td>
<td>16 gauge</td>
<td>16-14 gauge</td>
</tr>
<tr>
<td>Thick: Oxytetracycline</td>
<td>18-16 gauge</td>
<td>16 gauge</td>
<td>16-14 gauge</td>
</tr>
<tr>
<td></td>
<td>18 gauge</td>
<td>16 gauge</td>
<td>18 gauge</td>
</tr>
</tbody>
</table>

**SELECT THE NEEDLE TO FIT THE CATTLE SIZE (THE SMALLEST PRACTICAL SIZE WITHOUT BENDING)**

Another important consideration with needles is replacing them. A needle begins to become dull and dirty with the very first injection. BQA guidelines recommend replacing needles after a maximum of ten injections. Never straighten a bent needle. Bent needles are weakened and much more prone to breaking. If a needle breaks off in an animal, it must be removed. A needle fragment can migrate, making it impossible to find. An animal with a broken needle in it should never be marketed.

For interested producers, there will be a BQA Chuteside Demonstration March 17, 2012 at Powell Livestock in Smithfield, NC beginning at 9 AM. This will be a hands-on demonstration with live cattle. Anyone wishing to be certified will have to pay a $40 certification fee ($15 for NC Cattlemen’s Association members.)

There will be a BQA Value-Added Graded Feeder Calf Sale in Smithfield on August 21, 2012. This will be open to BQA certified producers. Calves must be weaned 45 days, bunk broke, EID tagged and vaccinated with a Process Verified Program. For more information call the Johnston County Extension Office at (919) 989-5380.
North Carolina Cooperative Extension

St. Andrews University's Equestrian Program  
By: Michelle Shooter, Extension Livestock Agent with N.C. Cooperative Extension in Robeson County

Nestled into the farming landscape of Scotland County is the 100-acre St. Andrews University's Equestrian program. Although I have lived twenty minutes from this facility for over eight years, I've never taken the opportunity to learn more about it, until yesterday. The purpose of the visit yesterday was to learn about the program and write it up for this blog. The program is very multifaceted and it will be hard to describe all that they do, so I will include the website address at the bottom of the post. Like many other Colleges and Universities in North Carolina, St. Andrews has competitive teams that compete in the IHSA (Intercollegiate Horse Show Association) and they have hosted several events at their facilities in Scotland County. I met with Peggy McElveen, the Equestrian Director and she showed me the different units (Western Stables, English Stables, Student Horse Boarding Stables, Covered Arena). The facility is very nice and exists because of a lot of hard work, donations of time and money, and grants received.

I was most intrigued by The Therapeutic Horsemanship Program, one of the first in the nation and the University's "Ride like a Knight" Program. This program serves individuals with ADD or other Hyperactivity Disorder, At Risk Youth, Autism, Cerebral Palsy, Development Delay or Disability, Downs Syndrome, Hearing Impairment, Learning Disability, Mental Retardation, Multiple Sclerosis, Muscular Dystrophy, or Speech Impairment. The University also works with the Wounded Warrior Project. The Wounded Warrior Project's mission is to "foster the most successful, well-adjusted generation of wounded service members in our nation's history." The program at St. Andrews allows the opportunity for wounded veterans to get back in the saddle or in some cases it allows veterans who have never been on a horse the opportunity to ride. For more information about this program and the other equine programs at St. Andrews University, visit the school's website. That link, as well, as the PATH (Professional Association of Therapeutic Horsemanship International) and Wounded Warriors link are below.

http://www.sapc.edu/Equest/equest.php
http://sapcequestrian.blogspot.com/
http://www.pathintl.org/about-path-intl/about-path-intl


Our riders choose St. Andrews for our strong academics as well as for our nationally recognized riding program. If you are interested in blending Equine Studies with other disciplines, you may find that a major in Equine Business Management is the perfect combination. Graduating with a B.A. in Business Administration with a specialization in Equine Business Management prepares you for many careers in and out of the equestrian industry. Or you may choose to major in another discipline such as Psychology, Biology, Art or Politics while pursuing a minor in Equine Studies. Pre-Veterinary studies may be your interest if you are planning to attend veterinary school or become a Veterinarian Technician. The options are limitless and the professors at St. Andrews will work with you to help you obtain your goals.
The first step of proper hoof care for sheep and goats is good management. You should keep a check on your flock or herd on a regular basis for hoof growth; some animals may need trimming more often than others. If you notice any other signs, such as abnormalities in locomotion (limping, walking slower than normal, etc.) or animals experiencing pain either on the move or standing still, the hooves probably need to be trimmed. Regular hoof trimming is necessary to keep hooves from overgrowing, to keep animals walking properly, and to prevent larger problems such as footrot and foot scald. To keep trimmers sharp, most of the dirt and debris should be removed from the hoof before trimming. You can use a hoof pick or the tip of the trimmers.

The goal of trimming is for the bottom of the hoof to be flat and at the same angle as the hairline at the top of the hoof. The walls should be trimmed flat with the sole (which can be trimmed if needed) and the toe may need to be trimmed. Both halves of the hoof should be about the same length and the hoof should be trimmed a little at the time and stopped when pink appears to avoid bleeding. Dirt within the hard wall or pockets of dirt or infection should be cut out. A video of proper hoof trimming can be seen here: http://www.extension.org/pages/30650/goat-basic-hoof-care.

If the hooves are not taken care of regularly, structural incorrectness may occur, as well as larger problems such as footrot or foot scald. Footrot is a costly disease in the sheep and goat industry. Once footrot becomes a problem, it takes a lot of effort and time to eliminate it, so prevention is key. Footrot and foot scald are caused by bacteria that live in the soil and manure and thrive in cold, wet conditions. When irritation occurs to the interdigital tissue, likely caused from moisture or trauma, the bacteria gains entry into the hoof.

Footrot and foot scald cause lameness, reduced milk and wool production, and reduced weight gain. Foot scald is characterized by reddened, inflamed tissue in the interdigital area (between the toes) and treatment or improved environmental conditions will get rid of it fairly quickly. Footrot, however, is a much larger problem. The bacteria will start to digest the hard tissue of the sole that protects the fleshy tissue of the hoof. The hard part of the hoof will eventually start to detach from the underlying tissue and a foul, very distinct smell, will be observed.

Current research suggests that systemic treatment with antibiotics with or without trimming of the hoof is most effective. Correct trimming of the hooves and removing all of the infected part of the sole that has detached from the underlying tissues are the best treatments. Having animals stand in medicated foot baths (10% copper or zinc sulfate) is another commonly recommended treatment. It may be necessary to repeat treatments, depending on severity. Consult your veterinarian or County Extension Agent if more aggressive treatment is needed.

The best control of footrot and foot scald is prevention.

- Keep all new animals quarantined for 20 to 30 days before introducing them to the herd. Inspect and trim hooves during quarantine.
- All show animals or animals that have been exposed to contaminated soil should be quarantined.
- Avoid buying animals from sale barns; most animals that have failed treatment are taken here.
- Provide good drainage to all areas where water tends to pool to prevent bacteria from collecting.
- Keep barns dry and clean.
- Practice good hoof care and management; check feet every time you work the herd/flock.
Ask any livestock breeder, regardless of species, if they can select an outstanding animal way early in their life. More often than not their honest answer is no. Sure, some experienced breeders that know their bloodlines and have experience with their proven females can give you a pretty educated guess, but pastures and meat cases are full of animals that should have been much better than they were. This is especially true when it comes time to select show animals. In many ways, early show animal selection can be even more difficult than breeding animal selection. Breeding animals have numerical data (EPD’s, SPI, Flock Indexes, etc…) that can provide some additional clarity on a particular animal’s worth other than how we think it might look when it is grown up. Show animal selection, which is 99% based on physical appearance is very difficult to do to an animal that is still very early in its life. At any fair or show you go to you can find exhibitors on every isle that has a story about a show animal that was “can’t miss” while it was still running with it’s mother or “the best whether in the prospect sale” several months ago and it simply failed to grow to its potential. The truth is the animal did grow to its potential; it was our expectations that were off.

Is it hopeless to think you can pick a winner out of a pen of weanlings?

It is not. Below are a few areas that most animal breeders will agree are fairly accurate rules of thumb when it comes time to evaluate a young show animal prospect.

Rarely do structural problems get better with age. This is true about 99% of the time. Conformational defects such as legs, hips, backs, shoulders, etc, almost never improve with age. They very often get worse! If you buy an animal with a bad hip or an open set of shoulders, you can pretty much bet that they will still have these issues months later when it comes time to stand in front of a judge.

Light muscled animals rarely can improve to be a heavy muscled animal. This is an area that some people will argue with a little, and there are some shades of grey to this statement. Training (especially with sheep and goat exhibitors) can improve upon an animal’s natural level of muscling. The thing to keep in mind with this though, is that this will pretty much give you an edge on down the road when in competition with a similar animal. Do not be fooled into thinking that while you no doubt can improve on an animal’s degree of muscling in time, you cannot make an apple from an orange. The people that started with apples in the first place will still beat you 9 out of 10 times.

The other thing to remember along these lines is that fat is not muscle. You can get an animal to look a little better when taking it from a Body Condition Score of 4 to a 6, but if it was still very light muscled through the rump and over the top when you started the animal out it’s still going to lack that same muscle at the end. The judge will just have to look at it for 6 seconds to pick this up instead of 3 seconds.

She will look more feminine in a few months. No she won’t. If she is a block-headed short-necked female with a set of shoulders that blocks out the sun at weaning, age will not be kind to her.

Sure this animal was trying to tear the barn down when I bought him, but he’ll be a baby-sitter after I mess with him a while. This is the most debatable topic I will discuss. No doubt all show animals will get calmer with training and experience. Rarely does an animal get pulled from its mother and is a puppy dog the next day. But, if it’s an absolute idiot that is trying to tear the fence down every time you go to catch it or if you break 4 halters trying to teach it to lead, you can pretty much bet he will be a handful until you either turn him back out to pasture or put it on the trailer on sale day.

While there are no guarantees or absolute rules to follow when selecting show animals, just plain common sense and being realistic on how much an animal can improve with time are the best factors to use when the bidding starts.
Spring is here once again, a little early this year it seems, but that means it’s time to start preparing fields for planting or planning that first nutrient feeding for your forage crops. With increasing cost of commercial fertilizers the demand for poultry litter continues to rise driving up the cost of this nutrient source as well. So what is a ton of litter really worth? Is it cheaper than commercial fertilizer? Well those are some good questions to ask and in order to make the best decision with your fertilizer dollars, and to make sure you are getting a fair price they are questions you should know the answers to. Poultry litter like all animal manures is a combination fertilizer, meaning it has some of all three major nutrients; Nitrogen (N), potassium (K), and phosphorous (P). The amounts of each of these nutrients also fluctuate from every source making it difficult to put an exact dollar value on the nutrient content. Because most soils in NC have adequate phosphorous, and over application of nutrients can have a negative impact on water quality, we are not going to consider its value in this example but the same process can be used to calculate a value if you need it for your situation.

The first step in determining the value of a poultry litter is to determine its’ nutrient levels, this is done by having a sample analyzed. For the purpose of this example I am using the NCDA Waste Analysis division four-year average for Broiler House Litter nutrients. Let’s calculate the value per pound of N in a ton of litter at a given price. In order to get this value divide the cost of litter per ton by the lbs of N in the litter (26.15) you get this value from your analysis.

Price of litter = $10/ton --- = $ .3824 round to $.38/lb
Lbs of N in litter = 26.15lbs/ton lb

Now we have to determine the value for a pound of nitrogen from a commercial source, for this example I am using a quote for 30% Urea Ammonium Nitrate at $300/ton. This means that there is 600lbs of N in a ton of this product.

30% = (.30) x (2000lbs in a ton) = 600lbs of N.

Price of Fertilizer = $300/ton = $ .50 lb
Lbs of N in fertilizer = 600lbs/ton lb

With the example we can quickly see that at $10/ton this litter saves us $.12/lb on N cost alone. Using these same simple calculations the value of potassium can be determine as well. For this example I am using a quote price of $535 per ton of 60% muriate of potash. Again this means there are 1200lbs of K per ton of this product. 60% = (.60) x (2000lbs in a ton) = 1200lbs of N.

Price of litter = $10/ton --- = $ .2696 round to $.27/lb
Lbs of K in litter = 37.08lbs/ton lb

Price of Fertilizer = $535/ton = $ .45/lb
Lbs of K in fertilizer = 1200lbs/ton lb

This litter source would save $.18 per pound of K. Armed with these simple calculations, commercial prices for comparison and a good litter analysis you should be able to determine an fairly accurate value of any given litter source. Please remember to consider and factor in other cost such as hauling and spreading cost. Also understand that with poultry litter or any animal manure you are going to get some level of all three nutrients and if your crop or soil already has these needs met you may need to consider using a single source nutrient or a combination of nutrient sources to obtain the best results and protect water quality by preventing over application of nutrients that may be lost to runoff or leaching.