LIVESTOCK NEWS

Pasture and Turf Expo

The Expo will be held Thursday, March 16, from 4 - 9 p.m. at the Robeson County Fairgrounds, Highway 41 South, Lumberton. Specialists from North Carolina State University will speak on Establishment and Maintenance of Warm-Season Turfgrass, General Forage and Pasture Information, Turfgrass and Pesticides, and Specific Forages for Meat Goats and Beef Cattle. Come visit with businesses involved in the pasture and turf industry. They will have booths set up for producers to learn more about specific topics. If you are a business that deals with the pasture or turf industry, please call Tiffanee Conrad-Acuña at 910-671-3276 to sign up for a booth.

Upcoming Events

<table>
<thead>
<tr>
<th>Event Date</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 14, 5:30-9:30 p.m.</td>
<td>N.C. Meat Goat Producers Certification Training, Goldsboro</td>
</tr>
<tr>
<td>March 16</td>
<td>* Pasture and Turf Expo, Robeson County Fairgrounds</td>
</tr>
<tr>
<td>March 22</td>
<td>* Feeder Calf Sale, Clinton</td>
</tr>
<tr>
<td>March 25, 8 a.m.-12 noon **</td>
<td>Robeson County Meat Goat Pick-Up, 10020 Highway 72 East, Lumberton</td>
</tr>
<tr>
<td>March 28</td>
<td>* Beef Quality Assurance Certification Class, Bladen County</td>
</tr>
<tr>
<td>April 6</td>
<td>* Continuing Education Credits, Hoke County</td>
</tr>
<tr>
<td>April 25</td>
<td>* Continuing Education Credits, Bladen County</td>
</tr>
<tr>
<td>April 25</td>
<td>* Beef Quality Assurance Certification Class, Robeson County</td>
</tr>
<tr>
<td>June 8</td>
<td>* Exam for Animal Waste Operators</td>
</tr>
<tr>
<td>September 14</td>
<td>* Exam for Animal Waste Operators</td>
</tr>
<tr>
<td>November 9</td>
<td>* Continuing Education Credits, Bladen County</td>
</tr>
<tr>
<td>December 7</td>
<td>* Continuing Education Credits, Robeson County</td>
</tr>
<tr>
<td>December 14</td>
<td>* Exam for Animal Waste Operators</td>
</tr>
</tbody>
</table>

* See article in this newsletter for details.

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

If you are interested in learning more about any information in this newsletter, please call me at the Robeson County Center of the North Carolina Cooperative Extension Service at 910-671-3276 or E-mail me at Tiff_Conrad@ncsu.edu. Individuals with disabilities and/or special needs interested in these meetings should call so proper arrangements can be made.

Sincerely,

Tiffanee Conrad-Acuña
Extension Area Agent
Agriculture - Livestock
Animal Waste Management
Compiled by Becky Spearman, Bladen County Livestock Agent

Crop Yield Record
The Division of Water Quality (DWQ) requires swine producers to keep records on several waste management activities. The Crop Yield Record is one of those forms. This form is required for NPDES and general permits. The intent of the Crop Yield is NOT to determine the yield of the crop but to document that a crop was grown and harvested. You must fill out the date, field per pull id, crop, yield in bales or bushels, and bale size. Field per pull size and yield per acre are optional columns. For grazed pastures, include grazed in the crop column (ex. Coastal Bermuda - grazed). Bale size can be a general description, such as small round, large round, or square bale. Alternate forms can be used if approved by DWQ. Call the Extension Center if you need a copy.

Calibration and Sludge Survey Equipment
The Extension Center has equipment available that producers can check out to perform their sludge survey and equipment calibrations. We have handouts that explain how to perform the calibrations and sludge surveys. I am also available to help answer questions and help with the math involved in both processes. If you are interested in checking out any of the equipment, please call the Extension Center to reserve the equipment.

Farms with NPDES Permits - Producers are required to calibrate their irrigation equipment and perform a sludge survey every year. All NPDES farms are required to complete these by December 31, 2006, unless an extension was given.

Farms with General Permits - Producers are required to calibrate their irrigation equipment within two years of receiving their new permit (by October 1, 2006) and at least once every two years thereafter. They must also perform a sludge survey within two years of receiving their new permit (by October 1, 2006) and every year thereafter.

On April 25, there will be a two-hour continuing education class on sludge surveys (see details below). This class is designed to let you start your sludge survey. If you have a lagoon that you need to survey, please bring the following information with you: size of lagoon surface area (acres), measurements in feet of lagoon bank (150 feet x 300 feet), and maximum and minimum liquid level for the lagoon (start and stop pump). If you need help in finding these numbers, call the office before the class. If you do not have a lagoon but want to come, I will have examples for the class.

Animal Waste Operators Certification
Law requires operators of animal waste management systems to be certified. To become certified, one must complete an approved training course, pass an appropriate examination, and pay the required fees.

2006 Exam Dates are June 8, September 14, and December 14. Applications to take the exam must be postmarked at least 30 days prior to date of exam.

Currently, there are no training classes scheduled. If you or an employee need the training class, call to be put on the waiting list.

Continuing Education Credits for Animal Waste Operators
April 6, 7 - 8 p.m., Cooperative Extension Center in Hoke County (1 hour). Call 875-2162 to register.

April 25, 7 - 9 p.m., Cooperative Extension Center in Bladen County (2 hours). Call 862-4591 to register.

November 9, 10 a.m. - 5 p.m., Cooperative Extension Center in Bladen County (6 hours). Call 862-4591 to register.

December 7, 10 a.m. - 5 p.m., Cooperative Extension Center in Robeson County (6 hours). Call 671-3276 to register.
Beef producers provide a wholesome beef product for the consumer. The Beef Quality Assurance (BQA) Program's mission is to maximize consumer confidence and acceptance of beef by focusing the producer's attention to daily production practices that influence the safety, wholesomeness, and quality of beef and beef products. The BQA Program is a complete approach to beef production practices that can impact a producer's bottom line. BQA includes record keeping, injection site management, feeding, and animal care. To be a certified producer, there is a $15 fee for three years for North Carolina Cattlemen's Association members and a $40 fee for nonmembers. Producers will take a recertification exam every three years and will pay the fees. Why should you be certified? A BQA Certified Montana cow-calf producer can receive an extra $9 - $18 per head when marketing feeder calves. The certification can help when you are marketing your calves. Also, it is the right thing to do - knowing how to produce a safe, wholesome product.

Here are two upcoming BQA certification classes in our area. Attendance is free; the fee is for certification.

**Tuesday, March 28, at 7 p.m. in Bladen County**
Call 910-862-4591 to register

**Tuesday, April 25, at 7 p.m. in Robeson County**
Call 910-671-3276 to register

### Herd Health Programs

*Adapted by Becky Spearman from Alabama and Virginia Cooperative Extension*

Losses caused by disease decrease the profitability of many cow/calf beef operations. Disease results in animal death, failure or decreased efficiency in reproduction, and decreases in growth and productivity. Prevention rather than treatment is the most economical approach to keeping disease losses low. Treatment of a disease is not always effective and is often costly. Herd health programs are designed to provide routine, planned procedures to prevent or minimize disease.

Develop a herd health program or plan. Many programs fail because too much reliance is put on vaccinations and treatments. Herd health programs must be tailored to each farm. Consult with your veterinarian to decide your plan. Three major factors should be considered to keep disease losses to a minimum. First, prevent exposure to disease into the herd by using good biosecurity procedures (including quarantining newly purchased animals). Second, keep disease resistance high by having good nutrition, management, and housing programs. Minimizing animal stress keeps good resistance. Third, if a disease occurs, prevent its spread by segregating affected animals. Make a diagnosis and take recommended action as soon as possible.

Vaccination programs are designed to protect animals against disease caused by infectious organisms, such as viruses or bacteria. Vaccines contain killed or modified live organisms which do not cause disease but stimulate the animal's immune system to mount a response. The immune system will then "remember" how to mount a response against the organism if it is infected with that organism later. A vaccine cannot prevent infection but increases the animal's ability to throw off the infection or lessen the severity of the disease. Modified live vaccines replicate themselves in the animal after injection. They do not cause the disease but will stimulate the immune system. Modified live vaccines are mainly available for diseases caused by viruses. Killed vaccines contain organisms which do not reproduce themselves in the animal after injection. Killed vaccines contain an added substance which further stimulates the immune system to respond to the vaccine challenge. In general, modified live vaccines stimulate a longer lasting immunity than killed vaccines. However, some modified live virus vaccines can cause abortion in pregnant cows. In addition, some modified live vaccines are not approved in calves nursing pregnant cows because of the slight possibility that the calves could temporarily shed the vaccine virus and infect the cows. Most cattle vaccines are injected, although some may be given by other routes (intranasal or oral). The label will always specify which diseases and microorganisms the vaccine provides protection against.

Terms such as 4-way, 5-way, 7-way, or 8-way do not refer to any particular type of vaccine, but rather to the number of different subtypes of a microorganism in a vaccine. These terms are most often used for leptospirosis or clostridial disease vaccines, which contain several different subtypes of the *Leptospira* or *Clostridium* organisms. The herd veterinarian will know which types of vaccine for your management plan. The May newsletter will have specifics on diseases and vaccination recommendations.

**The Clinton Feeder Calf Sale** will be **Wednesday, March 22**, at 10 a.m. at the Sampson County Livestock Facility located in Clinton. Cattle intake is March 21 between 7 a.m. and 4 p.m. For details or to register, contact George Upton or Paul Gonzalez at the Extension Center in Sampson County at 910-592-7161.
Forage Management Tips

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

March
- Apply fertilizer to cool-season grasses to increase spring 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 or burning.
- Grass tetany may be a problem as rapid grass growth and cool, wet weather prevails. To maximize stockpiled fescue, restrict the grazing area (cross fencing) so that four to six cows graze on an acre.

April
- Fertilize cool-season grasses if you have not already done so.
- Watch for symptoms of grass tetany.
- Use all winter annual pastures before grazing on other pastures which may be harvested as hay.
- Fertilize warm-season grasses as soon as dormancy breaks.
- Get all hybrid bermudagrass established this month unless irrigation is available.

Grazing Behavior of Meat Goats

*By Tiffanee Conrad-Acuña*

Goats offer an opportunity to effectively convert pasture nutrients to animal products, such as milk, meat, and fiber, which are currently marketable and in demand by a growing segment of the United States population. Goats selectively graze unwanted vegetation in pastures and forests, thus providing biological control, which reduces dependence on certain pesticides. Goats consume only the most nutritious parts of a wide range of grasses, legumes, and browse plants. Browse plants include brambles, shrubs, trees, and vines with woody stems. The quality of feed depends on many things, but it is usually most directly related to the age or stage of growth at the time of grazing.

Grazing Behavior

Goats are very active foragers, because they are able to cover a wide area in search of scarce plant materials. Their small mouths and split upper lips enable them to pick small leaves, flowers, fruits, and other plant parts, thus choosing only the most nutritious available feed. The ability to use browse species, which often have thorns and an upright growth habit with small leaves tucked among woody stems, is a unique characteristic of the goat compared to heavier, less agile ruminants. Goats have been observed to stand on their hind legs and stretch up to browse tree leaves or throw their bodies against saplings to bring the tops within reach.

The feeding strategy of goats appears to be to select grasses when the protein content and digestibility are high but to switch to browse when the latter overall nutritive value may be higher. This ability is best used under conditions where there is a broad range in the digestibility of the available feeds, giving an advantage to an animal which is able to select highly digestible parts and reject those materials low in quality. Grazing goats have been observed to:

- select grass over clover
- prefer browsing over grazing pastures
- prefer foraging on rough and steep land over flat, smooth land
- graze along fence lines before grazing the center of a pasture
- graze the top of pasture canopy fairly uniformly before grazing close to the soil level

Because of their inquisitive nature and tolerance of "bitter" or high tannin material, goats may eat unpalatable weeds and wild shrubs that may be poisonous, such as cherry or milkweed. The absence or the severity of poisoning is related to the quantity of material consumed, the portion and age of the plant eaten, the season of the year, the age and size of the animal, and other factors. In addition, several ornamental plants that are grown outdoors or indoors are highly toxic. For example, goats should not have access to, or be fed clippings of, yew, azaleas, delphinium, lily-of-the-valley, and larkspur. In a pasture situation, goats are "top down" grazers. This behavior results in uniform grazing and favors a first grazer-last grazer system. This might consist of using a goat herd as the first group and cattle as the last group. This management is most appropriate with lactating does or growing kids.
Producers may have goats to die and they are not sure of the reason why. One way to know why an animal died is to have a necropsy performed. Necropsy is the examination of a deceased animal to determine cause of death, like an autopsy in a human. The purpose of this examination is to attempt to determine the cause of death and whether or not it represents a concern for the herd. For instance, the necropsy may reveal presence of parasites or pneumonia or other potential herd problems. Without performing a necropsy, it is often impossible to determine the cause of death.

Some deaths are the result of obvious causes: death caused by predator, by an electrified fence, et cetera. When the cause of death is unknown, a necropsy may be useful in determining the cause and whether or not it represents a concern for the herd. When you encounter a dead goat (regardless of the type of animal: doe, buck, growing kid, recently born kid, kid born dead, or a dead fetus), and you cannot determine the cause of death.

- Immediately put the dead animal in a plastic bag and store it in a refrigerator or a large cooler with ice. This limits the natural decomposition making it more likely that a cause can be determined. DO NOT FREEZE THE DEAD ANIMAL. Handle the dead goat with disposable gloves and wash your hands thoroughly afterwards, because some diseases can be transmitted to humans.
- Call your local veterinarian, your Extension livestock agent, or the nearest North Carolina Veterinary Diagnostic Laboratory (see list below) for advice. A veterinarian can perform a necropsy. Another option is to bring the dead animal immediately to the nearest North Carolina Veterinary Diagnostic Lab (NCVDL)--the sooner after death the better.
- If the dead animal is decomposing, take it to a licensed facility or bury it on your property at least three feet deep and no closer that 300 feet to any flowing stream or public body of water.

The NCVDL accepts dead animals, feces, blood, and tissue samples for examination. They are under the Veterinary Division of the North Carolina Department of Agriculture & Consumer Sciences. Guidelines for sample of animal submittal are as follows:

1. Live and non-decomposed dead animals, fresh and formalin-fixed tissues, whole blood, serum, milk, and feed are commonly submitted specimens.
2. Animals for necropsy are accepted from both veterinarians and owners.
3. Submittal forms are available on the lab website.
4. A complete history should accompany all submissions and include the owner's address and telephone number as well as the age, breed, and sex of the animal.
5. Specimens mailed to the laboratory should be clearly labeled, and submittal forms should accompany the specimens sealed in a separate plastic bag.
6. Shipment should be overnight service to maximize the reliability of any diagnostic test findings. (Check regulations about what can be shipped.)

The general website and E-mail address of the NCVDL System are:

Website: http://www.ncvdl.com/       E-mail: NCVDL@ncmail.net

The website home page has several links that you can follow to learn more about their services. Fees vary with the type and size of the animal (food or companion animal) and the type of service performed. Three labs closest to us:

- Rollins Laboratory in Raleigh -- Phone: 919-733-3986, E-mail: Gene.Erickson@ncmail.net
- Griffin Laboratory in Monroe -- Phone: 704-289-6448, E-mail: MonroeVet@vnet.net
- Rose Hill Laboratory in Rose Hill -- Phone: 910-289-2635, E-mail: nced@intrstar.net

For more information on this article or to find out more about the labs, please call the Extension Center.
Choosing the Right Stallion for Your Mare

By Tiffanee Conrad-Acuña

Artificial insemination has brought many opportunities to the horse industry. Choosing a stallion for your mare seems to be an incredibly tricky decision to make these days. There are thousands and thousands of stallions on the market that you can choose from. Choosing the right stallion demands research and an attention to detail. There are four points to remember when searching for a stallion. Those points are conformation, pedigree, performance, and prepotency.

Conformation refers to a horse that is well balanced. A horse's basic body conformation will vary somewhat by breed. However, all horses have their own individual structural attributes. A horse's conformation determines how well it can perform the functions that it needs to perform. Imagine splitting your horse in three parts. The first part includes the length of the neck. The middle part is the back of the horse. The last part is the croup. Sometimes the horse is out of balance, meaning it has bad conformation. Examples might include the back being too long or the last part of the horse being bigger than the front of the horse. No horse is perfect, so look at your mare and determine what she is lacking. Next, look for stallions that make up for her imperfections. For example, if your mare has a short back, look for a stallion with a long back. Also, study his family heritage and make sure the trait you are looking for is consistent. You must be careful when looking at photos of stallions, because pictures are oftentimes deceiving. If possible, personally view each stallion that you are thinking about breeding with your mare. If this is not feasible, try to get photos or videos from all angles of the horse.

Pedigree refers to the horse's ancestry. The details of the pedigree can be found in a studbook or breed registry. You want to avoid selecting a stallion that has a similar genetic makeup as your mare. You don't want to cross first and second generation similarities. This can cause problems with inbreeding. Before crossing lines, be aware of certain characteristics those horses are known for. For example, the Impressive line is known for heavy muscling. Also, make yourself aware of possible genetic flaws a horse may be carrying. For example, the Impressive bloodline is also known for carrying the HYPP gene. HYPP horses can have muscle tremors and weakness. Sudden death can occur from these horses experiencing stressful conditions.

Performance means what the horse and its family have accomplished. The family includes the stallion's parents, grandparents, siblings, and foals. You can search performance records based on what the horse has competed in. Examples might be dressage, hunters, jumpers, racing, western pleasure, eventing, and driving. A stallion's semen is going to be more expensive if it has a high performance record in whichever style it has competed.

Prepotency refers to the stallion's ability to transfer his characteristics to his offspring. This means he will transmit more properties to a greater degree than the mare. His foals should look and perform consistently. The more foals that he has, the more additional evidence he has of prepotency. Sometimes prepotency is general, referring to breed. When people say that a breed is prepotent, they are talking about the breed having the ability to transmit the characteristics of the breed. Prepotency of breed is clearly seen when two distinct breeds are crossed. The offspring will more closely resemble the breed possessed of the most prepotency.

When receiving stallion advice from experts, be careful of someone giving advice that has something to gain. The person may be giving bad advice in order to sell their stallion to you. Start researching way before you are thinking about breeding. This will give you enough time to make an educated decision. Don't breed to a stallion just because he is "famous" or well marketed. This does not mean that he fits with your mare. Also, don't pick a stallion just because he has a high dollar semen or stud fee; you need to look at the above four characteristics and weigh the price to make the best decision.

Horse Meeting -- The meeting will be held Tuesday, March 21, at the Robeson County Fairgrounds, Highway 41 South, Lumberton. Registration and a hot dog meal will begin at 6:30 p.m. with the program starting at 7 p.m. Mark Hausman, horse trainer from Charlotte, is going to show how to train horses. For more information and to register, call Grover Soesbee with Carolina Grain at 739-3487 or James Collins with Collins and Sons Milling Company at 843-4084.

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