March 10 - Direct Marketing Beef Meeting at 5 pm - This meeting is for producers interested in direct marketing to consumers. Ashley Williams, NC Cattlemen’s Association, and Becky Spearman will discuss marketing tips (value cuts and recipes) and regulations. Call 862-4591 to register.

March 10 - Bladen County Livestock Association Meeting at 7 pm Ashley Williams, NC Cattlemen’s Assn., and Tim Jackson, Land of Lakes/Purina, will speak. Call 862-4591 to register by March 9th. (see attached letter for more information).

March 15 - Horse Referendum Vote Horse and other equine owners/lessors will vote to determine whether to continue to voluntarily assess themselves two dollars per ton of commercial horse feed to provide funds to promote the interests of the horse industry. Voting will be at the Bladen Office from 8:30 am to 5 pm on March 15th. Any NC resident (at least 9 years old as of January 1, 2011) and who has ownership or lease of an equine is eligible to vote. Absentee voting is available by requesting a ballot in person or through the mail (return to the office by March 14).

March 15 - Horse Webcast at 7pm Bladen Extension will host a webcast on Trailer Safety and State Motor Vehicle Regulations. Call 862-4591 by March 14th to register.

Important Information

March 22 - Murphy-Brown Expo The expo will be from 8 am-5 pm at the Duplin Events Center located at 195 Fairground Drive in Kenansville. Expo admission is free and includes lunch. The expo will have swine and poultry vendors and continuing education hours for operator in charge and pesticide license. A van will be leaving the Bladen Office at 8:30 am. Call 862-4591 to reserve your space in the van by March 21st.

March 23 - Clinton Feeder Calf Sale The sale will be at 7 pm at the Sampson County Livestock Facility. Cattle will be graded and penned on March 23rd between 7:30 am and 4 pm. For more information, call Paul Gonzalez at Sampson Extension at (910) 592-7161.

March 24 -Winter Grazing Field Day The field day will start at 3 pm at Rusty and Pat Patterson’s farm in Tar Heel. Dr. Matt Poore and others will talk about strip grazing winter annuals and ryegrass to extend grazing, mob grazing, fencing equipment, hay management, and NRCS/SWC updates. Continuing education credits will be given. Call 862-4591 to register.

Pesticide Classes in Bladen County - all classes start at 5pm - V Credits on March 8 or April 12 - X credits on March 22 or April 26

April 19 & 20 - Animal Waste/OIC Class - See page 2 for more details.

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.
10 Hr. Animal Waste Operators Certification Training

A waste management plan and waste application system are vital parts of an animal operation. To become a certified operator, one must complete an approved training course on the operation of animal waste management systems, pass the exam, and pay the required fees.

There will be a training class on April 19 and 20, 2011 at the Bladen County Extension Center starting at 10 am. Call (910) 862-4591 to register by April 15th. There is a cost for the class and manual. The 2011 exam dates are June 9, September 8, and November 10.

Inspection Issues

Keith Larick with the NC Division of Water Quality gave a presentation at the NC Pork Conference. He pulled information from their database on Notice of Violations (NOVs) since 2005 and compiled them by problem type. Below are some areas of concern:

- Records include incomplete or missing forms (IRR 1 & 2, freeboard, rainfall, crop yield, stocking), no Certificate of Coverage or Permit on site, or no OIC designation.
- Annual fees not paid or overdue.
- Improper Waste Application includes overloading on Plant available nitrogen (PAN), hydraulic overload, ponding, application on fields not in the certified animal waste management plan, and application outside of crop windows.
- Improper Operation & Maintenance (O&M) includes inadequate crop in sprayfield, irrigation equipment in poor condition, lagoon embankments in poor condition, missing or inadequate lagoon marker, failure to harvest crops.
- Sludge Survey not completed annually unless an extension is given.
- Calibration must be done every 2 years.
- Freeboard violations may result in Notices of Deficiency, unless the cause was deemed to be improper O&M based on rainfall, freeboard, and irrigation records.

He also noted some issues that do not usually receive a NOV, unless they are chronic issues. These included:

- Lagoon embankments
- Lime application - Permit requires that pH be maintained in the optimum range for crop production. In general, lime should be applied when soil report calls for over 1 Ton per acre. Keep records for inspector.
- Operator in Charge (OIC) – not receiving 6 hours credit every 3 years. If you don’t get your card, contact DWQ’s Technical Assistance and Certification Unit.

Hay Directories

There are two web site directories for people selling or buying hay. It is free to list your hay for sale.

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.
It seems early to start discussing bermudagrass management in February, but over the last few years more and more successful grass managers are learning that February-April can be as critical for managing Bermuda as June-August. Let’s discuss late-winter/early-spring Bermuda management decisions.

**To burn or not to burn?**
Controlled burning of bermudagrass is one of the oldest management tools around. What are some reasons to burn off fields this time of year? The most common reason is to remove standing grass from last season, which will prevent sunlight getting through to the new grass trying to break dormancy as well as decrease the quality of your first harvest. Removal of late summer weed residue, such as spiny pigweed or sandspurs is another reason people will burn. Finally, the removal of dead thatch on the ground will allow sunlight through as well as help the ground to warm up quicker. If you are not dealing with any of the above conditions then burning is probably not worth the time, trouble and risk. If you do need to burn however, make sure you can perform this task carefully.

Speaking from bitter experience, the first and foremost question you must ask yourself when deciding if you are going to burn is can you do it safely? Do you have the necessary equipment to control the fire, is the field located to where you can safely control the fire, and are environmental conditions in your favor to burn? If any of these factors are questionable, then leave the propane in the tank and err on the side of caution.

**Weed Control**
Years ago, weed control in bermudagrass this time of year was not very common. However, good hay growers have learned that you can improve the quality of your first cutting and save on your April/May herbicide bill by spraying earlier in the year. Since glyphosate prices have come down drastically in the last several years, a “burn down” glyphosate treatment in February/early March can go a long way in stopping early spring weeds from ever becoming a problem. The biggest trick for glyphosate applications though is the timing. Spray too early and you will miss most of the weeds you are hoping to control (as Glyphosate does not give any residual effects); too late and you will hurt your emerging bermudagrass as much as the weeds.

Another commonly used herbicide this time of year is Cimarron for controlling wild garlic/wild onions. Wild onions can be a bigger problem some years than in others, but certain fields will almost always have problems with them year in and year out. Glyphosate normally only gives fair control on onions, but Cimarron at .2-.3 oz/acre usually gives good results. Make sure you use a good surfactant when treating onions as the plant has a very narrow leaf that is difficult for the herbicide to get good contact on.

**When is the best time to fertilizer in the spring?**
This question gets posed to me every year. How early should I fertilize in the spring? Unfortunately there is no magic answer to this question. There are several factors that go into making this decision. What type of fertilizer are you using? How many fertilizer applications are you planning on making during the growing season? How important is the first cutting to you? What type of bermudagrass do you have? All of these questions play into the answer.

By far the biggest factor though, is what will the weather be like in April and May? If we had the ability to predict weather several weeks out and see that a good warm spring with plenty of rain is just around the corner than it makes all the sense in the world to go ahead and fertilize early and get the jump on your first cutting. However, if we have an abnormally cool spring and it turns dry, an early fertilizer application will not be near as effective and often times is little more than a waste of money.

Another factor to consider is what type of bermudagrass do you have. The newer, more cold tolerant varieties, such as Ozark (and to a degree Tifton 44) will break dormancy much earlier and would be able to utilize fertilizer earlier in the growing season. For bermudagrass varieties that are not as cold tolerant, such as Tifton 78 or 85, it makes much more sense to wait until later in the spring to fertilize these grasses.

There is no magic method for managing bermudagrass in the spring to guarantee you will get a good start to the growing season. Making good sound management decisions that are economically feasible is the best that anyone can do. Often times the only difference between a first rate grass farmer and a poor one is whether or not the long-range weather forecast is accurate.
For a cow-calf producer, selecting the next herd bull should require considerable thought and planning. The US Meat Animal Research Center estimates that 80 to 90 percent of the genetic improvement that takes place in a cattle herd is due to selecting sires that offer qualities needed in that herd. These days purebred breeders have a lot of tools at their disposal to provide information about the animals they are offering, and it can be difficult to wade through all the information available to determine what’s right for your herd. It’s important to evaluate your cow-herd and your recent calves to determine where they need the most improvement. Some areas to consider are size, muscling, soundness, udder characteristics, temperament, etc.

Usually the first decision to make is what breed of bull you want to use. It’s tempting to follow the trends, and the trend these days is certainly Angus. In the US last year there were more Angus cattle registered than the next six most popular breeds combined. But crossbreeding still has a place in the beef industry. Breeding to the same breed year after year will tend to move your herd toward the average of that breed. That may not be an improvement in all cases. Heterosis, or hybrid vigor, refers to the superior performance of a crossbred animal. Breed complementarity is the result of the strengths of one breed making up for weaknesses in another breed. British breeds, for example, are known to be early maturing, while the Exotics exhibit more aggressive growth, so crossing British and Exotic breeds often results in growthy calves with good fleshing ability. An example of this is the Angus/Charolais “smoky” calf. So one tried and true method of breed selection is to have cattle of a breed that match your environment, and select bulls of a breed to match the market.

EPD’s (Expected Progeny Difference) are measures of the expected performance of an animal’s offspring compared to other animals of the same breed. EPD’s are the most important tool available in examining herd sires. Most producers put a great deal of emphasis on selecting for low birth weight. This is important, because a large dead calf is worth a whole lot less than a small live calf. But it’s important to remember that often a bull with low birth weight EPD has lower EPD’s for weaning weight and yearling weight, as well. It’s also worth noting that smaller born calves are more prone to cold stress and starvation. Remember that older dams should be able to deliver calves with higher birth weights, so perhaps you might select a bull to breed to older cows that have a little higher birth weight, but also higher weaning weight or yearling weight EPD’s. You could expect to wean heavier calves, which means more pounds of calf to sell. Careful attention should certainly be paid to the birthweight of a bull used on heifers, but you are leaving money on the table if you breed all cows to a “heifer bull.” Having pelvic measurements of the cows in your herd can give you an idea of which animals should be capable of delivering larger calves.

It’s important to keep in mind that EPD’s are established for each breed relative to a base year for that breed’s average. So it’s not possible to directly compare birthweight, weaning weight, yearling weight EPD’s, etc. of one breed to another, because the breed averages are different. The US Meat Animal Research Center publishes adjustment factors to compare EPD’s across breeds, and these figures can be used to compare animals of different breeds on the same scale. With some experience using the adjustment factors a breeder should become comfortable in deciding on a range of values to consider in purchasing a bull for crossbreeding. Your Extension agent or a semen supplier should be able to provide a copy of the most recent crossbreed EPD table for you to use in selecting a bull for crossbreeding.

These are definitely not the only factors to consider in selecting a bull, but some of the most important. You should buy from a reputable breeder who has been in business for a substantial amount of time and selects for the traits you need in your herd. Cost is always a consideration, but a recent CattleFax survey indicated that the most profitable cattle producers spent more than the average on pasture leases, health products and herd bulls. The genetics of your next calf crop is a wise place to make a strong investment.
Being able to estimate body weight is useful in many different management scenarios. First, safe and effective feeding of horses should be done according to body weight. Additionally, many medications such as dewormers require an adequate estimate of body weight in order to avoid the danger and waste of overdosing, or the ineffectiveness of underdosing. Unfortunately, most horse farms do not have easy access to livestock scales. Research has shown that when using visual appraisal alone, the majority of horse owners underestimate their horse's weight by at least 150 pounds. There are two commonly used methods of estimating body weights in horses: 1) commercially available weight tapes that use only a heartgirth measurement and 2) weight estimation formulas that use both a heartgirth and a body length measurement. Although commercially available weight tapes may be the most commonly used, they have been shown in several studies to be the most inaccurate. The weight estimation formula is a more reliable method for estimating body weight compared to both visual observation and commercial heartgirth weight conversion tapes.

The weight estimation formula uses heartgirth circumference and a body length measurement, both measured in inches, along with an adjustment factor. The equation is:\[
\text{Body Weight (pounds)} = \frac{\text{Heartgirth} \times \text{Heartgirth} \times \text{Body Length}}{330}
\]

Measurements should be taken in inches with a plastic measuring tape that is at least 75 inches long, although longer tapes will be needed for larger breeds of horses. Cloth tapes should not be used as they can stretch giving inaccurate measurements. The heartgirth measurement should be taken by running the measuring tape around the circumference of the horse, directly behind the shoulder, crossing over the highest point of the withers, while keeping the tape perpendicular to the ground. Before taking the body length measurement, the horse should be stood square and on level ground. The length measurement is taken from the point of the horse’s shoulder, straight along the horse’s side and around the corner of the hip to the point of the buttock. The point of the buttock is half way between the widest part of the stifle and the tail. It will take two people to take the body length measurement. When using the formula to estimate body weight in weanling horses, the denominator should be changed from 330 to 280.

Studies conducted on hundreds of horses have shown the weight estimation formula to be the best method to estimate actual scale weight and although it will not be exact in all horses, it generally averages within 25 pounds of actual weight. Estimations will be more inaccurate in horses that are not as well balanced, particularly horses that are extremely heavy fronted and light hipped, and may be off by as much as 150 pounds. Additionally, estimations will not be as accurate in horses that are severely underweight (BCS less than 4) or overweight. Still, if scales are not available, the formula method will be a better estimation than commercial weight tapes or guessing.

A second source of inaccuracy with this method of weight estimation is human error. For owners who are learning to take measurements for the first time, it is a good idea to get an actual scale weight on one or two horses and then practice taking measurements to learn the proper placement of the measuring tape. Practice taking measurements as soon as possible after obtaining a scale weight, before the horse has had time for a large drink of water or a meal. Again, always make sure the horse is standing square and on level ground. Furthermore, if measurements are being taken on a horse to observe weight changes over time, these should be done at the same time of day, preferably in the morning prior to feeding.

Although it will not always be an exact estimation of actual weight, the weight estimation formula can be used effectively for most horses and will be a more reliable method than commercial heartgirth conversion tapes. Overall, this simple tool can be used by horse owners to better manage their animals.
I had a call from a local goat producer who was ecstatic over the birth of four kids from one of his does. On a whole, it is pretty rare in goats and most sheep breeds for quads to occur. Dr. Niki Whitley, Extension Animal Science Specialist and Adjunct Associate Professor from A&T State University Cooperative Extension, said she saw a lot of quads and even some quints when she worked in Maryland. At the research farm, she had some really fertile Boer x Spanish crosses that were flushed for maximal ovulation rates and were in really good body condition scores before they were bred. Dr. Whitley also said that there are some sheep breeds, like Romanovs, that have quads and quints regularly. So as exciting as it is, a producer must be conscious of this rare event and be proactive to ensure the health of all the babies and the mother.

Dr. Whitley has some pointers that can be used for goats, sheep, and even hogs if you ever find yourself with quads or quints. First of all, when your doe has the kids, make sure each kid is actively nursing. Dr. Whitley once found success by putting a quad mom in a 10’ x 10’ pen inside a barn and allowing her to eat alfalfa/grass hay and grain, free choice. Start the mom out slowly on the feed, she points out, and increase the amount of hay and grain until the doe leaves some. When the kids get about three weeks old or once they are all strong and it is apparent they are starting to "fight" for milk because they are eating a lot, she recommends taking two kids out in the morning and letting them run around in the rest of the barn. Allow the two to run around the barn but stay close to the mom’s pen. Then at night, switch out the two nursing kids for the ones who have been free to run around in the barn. Basically, this allows the doe to nurse only two at a time but still feed all four.

Dr. Whitley also recommends supplementing the ones that look hungry. Usually, once they get used to nursing a teat, they don’t like the bottle unless you really work with them, and sometimes they would rather starve than nurse a bottle.

Some producers are proactive by removing the biggest kid off the doe and make it a bottle baby. This leaves the smaller/weaker ones on mom, because they usually do better, unless they are already too weak to fight enough for food. If you can leave bottle babies with other goats, they learn to eat solid food faster and are less of a "bother" as they grow, though they likely will be very friendly anyway. Whatever you do, make sure your doe gets plenty to eat. Remember to increase her food slowly over time so she doesn't get sick.

Dr. Whitley has used the following milk replacers but does not endorse one over the other or over ones not mentioned. She says that most common milk replacers work fine. She has used Merrick (Premier sheep supply), Sav-a-kid, and Land O'Lakes. Just make sure to follow the directions, and the kids usually will do fine on the replacers.

An interesting note about Dr. Whitley’s rotating method is she actually came up with it when working with hogs. She had what she calls a “pig issue,” when two sows in a room both died after giving birth, but the sow in-between them survived. So she made two litters out of the three litters and had the babies share the remaining momma sow. Much to the surprise of Dr. Whitley, that sow raised over 30 babies! She was worried the sow would disregard the babies who had been taken away after each rotation. Sometimes we have to be inventive, but the main thing is to be proactive and watch the health of our animals and their young.