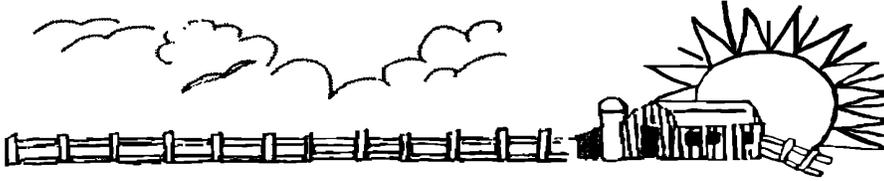


FENCELINES



May & June 2018

Forage Management Tips

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Important Information

Upcoming Events Dates to Remember

- ◆ **May 21st at 6:30 - Wayne County Cattlemen's meeting,** Farm Bureau Room at the Maxwell Center (please RSVP to Kim by May 16th)

Pesticide Information

All classes at the

Farm Bureau Room

To preregister please call
(919) 731-1520

- **Sept. 25th at 10 am** - Safety Class 2 hours of V credit
- **Sept. 25th at 1 pm** - Pesticide Class 2 hours of X credit

May

- Plant warm-season perennial grasses such as common or seeded bermudagrass.
- Plant summer annuals such as pearl millet by May 15.
- Fertilize warm-season grasses with nitrogen after each cutting or every four to six weeks on pastures.
- If irrigation is available, hybrid bermudagrass sprigs may be planted, but weed control will be essential.
- Spray pasture weeds while they are small (3 inches or smaller) for most effective control.

June

- Take soil samples from fields which will be overseeded or planted during the fall.
- Apply lime as far in advance of planting as possible.
- A late planting of summer annuals may be made to extend forage supply.
- To stimulate yield of warm-season grass such as bermuda, apply nitrogen after each cutting or every four to six weeks.
- Graze bermudagrass close (1 to 2 inch stubble) and harvest any growth that has not been grazed every four to six weeks.
- Control summer pasture weeds before they get too tall and mature.



For more information on material and events presented in this newsletter, contact your local Extension Agent at:

Stefani Sykes at
Stefani_Sykes@ncsu.edu
or (919) 731-1525

The Junior Livestock Show and Sale Committee would like to express their sincere appreciation to the many volunteers, supporters, and buyers that make the annual Junior Livestock Show and Sale successful.

Thank You!

Updates for Spring

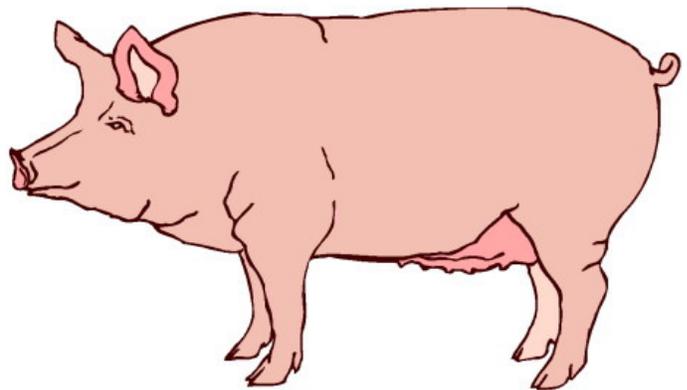
*By: Eve Honeycutt, Livestock Extension Agent with N.C. Cooperative Extension
in Lenoir and Greene Counties County*

It seems like Spring may finally be here in Eastern NC. As you prepare for the upcoming warm season, keep in mind a few items that can affect your farm this year.

- **New irrigation equipment or layout:** Your inspector will be looking for proper documentation for farms that have updated their irrigation systems over the years. For example: If you have added a center pivot or if you are using a reel instead of your solid set risers, this change must be properly documented and certified to be official. Contact a technical specialist to be sure your irrigation changes are properly certified.
- **Updated 100 lb PAN allowance for overseed:** Those of you that have bermudagrass sprayfields with a small grain overseed are now allowed 100 lbs of PAN for the overseed. There are some specifics that must be followed to use all of the 100 lbs of PAN. If you would like this update for your waste plan, you must contact a technical specialist for an amendment.
- **CERCLA Reporting:** Fortunately, the CERCLA/EPA reporting is no longer being required because legislators passed the FARM Act (Fair Agricultural Reporting Method Act), which exempts the reporting of “air emissions from animal waste at a farm” under CERCLA.

- **New tools available:** Your Extension Agents have access to some new technology for sludge surveys! In addition to our remote control sonar boat that we received last year, we also have sonar “bobbars” that can be used with a fishing rod to get accurate readings along the bottom of a lagoon. We hope to share more about these tools during waste credit classes this fall.
- **Waste Credit Training:** This year will be a big year for those that need waste credits. There are many of you that will need your 6 hour training before December 31. We will have a lot of opportunities for credit, so take advantage of those dates. The class schedule should be out by September.

For more information, contact your local Extension Agent.



Initial Animal Waste Operators and Continuing Education Classes

October 30th & 31st, 2018 10 am (10 hours) Initial Animal Waste Operator Class	Duplin County Extension Office Kenansville Cost \$35.00 for manual and class \$25.00 for exam fee to WPCSOCC	Call (910) 296-2143 to register with Wanda Hargrove
November 7th, 2018 (6 hours)	Robeson County Extension Office Lumberton	Call (910) 671-3276 or email Taylor_Chavis@ncsu.edu to register with Taylor Chavis
November 28th, 2018 (6 hours)	Cumberland County Extension Office, Fayetteville	Call (910) 321-6860 or email Liz_Lahti@ncsu.edu to register with Liz Lahti

Springtime Pasture and Hayfield Chores

By: Randy Wood, Livestock Extension Agent with N.C. Cooperative Extension in Scotland County

Now that spring is slowly making an appearance, we can start turning our focus on getting ready to grow some grass this summer. From late March through early May, bermuda is in the process of breaking dormancy and getting ready for summer growth. This time of year is also critical for farmers to do all they can to help bermuda reach full growth as quickly as possible.

Removal of small grain overseed

If you seeded small grain (rye, oats, wheat, triticale, etc.) in your bermuda pastures this past winter, now is the time to get them out of the way for your bermuda. Small grain overseeded into bermuda gives us way more grazing days than bermuda by itself. But starting around the first of May, the small grain has pretty much done what it can for you. Right now a battle is breaking out in these fields as the small grain struggles to keep growing and bermuda is trying to grow through it. Removing as much of the small grain as possible, through either intensive grazing, a cutting of hay, or even bush hogging is critical to helping this transition happen. The more mature grain plants that are left on the field in late spring, the later your bermuda will be ready this summer.

Spring fertilization

Fertilizing in the spring is not so much a matter of what, and more a matter of when. Each year we will always have a warm spell in February/ early March and everyone gets excited about getting a jump on the spring and getting fertilizer out early so they can be grazing the first of May. Then we have the inevitable April freeze. Fertilizing bermuda in the Sandhills is a matter of realizing that our soils simply do not hold most Nitrogen-based fertilizers for very long. I try to get livestock farmers to wait to fertilize until the grass has a fighting chance to use it before it is gone. There is a fine line between early fertilization so as to capture early spring growth and too early where you will be wasting your money as the fertilizer leaches unused through the soil on grass that is not yet growing. Let's discuss some strategies to fine-tune what you fertilize with.

Poultry Litter- litter is normally applied based on availability and shed space and less on the weather patterns. Litter, based on its ability to release N slowly as it warms up in the field, is by far the most forgiving if you put it out too early. Keep in mind while litter can be considered a "slow release" nutrient source, the

earlier you put it out, the earlier it is going to be gone by the end of the summer.

Lagoon Effluent- here is where we start to encounter a nutrient source that starts leaving as soon as you put it out. Lagoon effluent, by its very nature is a fast leaching fertilizer source. Most waste plans will allow you to start accumulating PAN credits on Bermuda somewhere around March 1st –March 15th depending on how your plan is written. While your lagoon level might leave you no choice but to go ahead and start pumping as soon as your plan allows you to, realistically much earlier than April 1st and most of the nutrient you are putting out is gone before your grass can start utilizing it.

Commercial fertilizer- Due to "sticker shock", most farmers tend to be a little more conservative with application dates when it comes to commercial fertilizer than with lagoon liquid or poultry litter. Due to this, we normally do not have as big of a problem with way too early fertilization with liquid N or granular fertilizer blends. Usually around the middle of April is probably about the earliest you would want to consider spreading a commercial fertilizer on your pasture or hayfield.

Finally, let's briefly discuss spring weed control.

By the first of May, the door to controlling winter weeds has long since past. Henbit, Chickweed and Wild Garlic are still standing, but there is little point in spraying them at this point.

Right now your attention needs to be on Red Sorrel, Mares Tail, Dog Fennel and Bahiagrass. All of these weeds are up and the smaller you spray them the easier they are to kill. One weed that has not made an appearance however is Pigweed (Spiny Amaranth). The decision that has to be made is go ahead and spray now and get good control of the early summer stuff above (at a lower chemical rate)? Or do you wait to get the first flush of Pigweed out of the ground to spray and then risk getting poorer control on things like Sourweed, Dock and Pokeweed? My advice is wait another week or two and hopefully the first round of pigweed will be up. You should still get pretty good control of the earlier broadleaf's while knocking Pigweed back until the middle of the summer.

Marketing Strategies for Cow-Calf Producers

By: Zack Taylor, Agriculture Extension Agent with N.C. Cooperative Extension in Lee County

As a cow-calf producer in North Carolina, you can choose to simply sell your calves by raising calves that are easy to raise and selling them at the most convenient outlet at the most convenient time. This sets you up as a price-taker, accepting the current market price, even when that price may be below what you need in order to break-even. But there is another option. You can choose to become a marketer. This means knowing what product to produce, where to market it, and when to sell, so the price is the best you can get. Simply taking the time to evaluate your options, your herd, and a few management decisions can set you up to be a marketer instead of a price-taker.

The first step is to know your cost of production. Without knowing your true cost to raise a calf, it is impossible to accurately determine your profitability. Additionally, understanding cost will help you determine what management practices and changes can give you the most return on your investment. The best way to determine your cost of production is by using a well calculated budget. NC State has several sample budgets available online for cow-calf producers through both the economics department and the farm school. Since each farm is different, it is critical to make adjustments to sample budgets to fit your individual farm. All budgets should include variable operating cost, such as feed, labor, minerals, etc., as well as fixed cost, such as equipment and overhead. Work with your agent to help identify things on your farm that should be included in your budget.

The next step is to plan for the market and know when to sell. Although markets can be unpredictable at times, there are some trends that producers can take advantage of. In the southeast, about 70 percent of calves are sold in the fall. This is why we see a seasonal price swing, with higher prices in the spring and lower prices in the fall. With your completed budget in hand, determine which management changes you can make that will allow you to have more market ready calves in the spring, if those changes are cost effective and will allow you to increase your profitability. Keep an eye on resources like the NC Department of Agriculture, which post daily prices at markets across North Carolina. These can help you determine the best time

and location to sell, but don't forget to include transportation cost in your budget. It is also important to consider lot size.



A tractor trailer load will typically bring about 5% more than selling a single-head. Having a short, defined breeding season offers several advantages, one of which is having uniform calves that can be sold together, but it is not for everyone, so consider if it will work for your operation.

Finally, identify low-cost management decisions that can help you provide the calves the market is demanding, which will help you increase the value of your calves. If you are not already a BQA certified producer, determine if becoming one and selling at a value-added sale makes sense for your operation. Value-added sales can immediately increase the sale price of your calves. In the long term, consider the characteristics of your herd. Take note of what characteristics are bringing higher prices at your market. Things like breed, color, frame, etc. Does your herd have these desirable characteristics? If not, consider selecting for these traits when choosing replacement heifers or introducing new genetics.

Each farm is different, and as a result, no two farms will have the same marketing plan. However, every farm should have a marketing plan in order to maximize their profits. With a little record-keeping and some careful decision making, you can become a marketer and increase the profitability and sustainability of your farm.

Fescue Toxicosis in Pregnant Mares

By: Kelly McCaskill, Livestock Extension Agent with N.C. Cooperative Extension in Moore County

Almost everyone that owns a horse is aware that the endophyte-containing tall fescue variety, Kentucky 31, and pregnant horses (or any breeding animal for that matter) don't mix, but few people know why. Kentucky 31 tall fescue is the most commonly grown fescue type in the Eastern United States. It has been used as a forage for over 50 years and is one of our most hearty and resilient grasses. It is a cool season, perennial grass that is quite nutritious and palatable. It is also one of the most commonly used grasses for soil stabilization due to its extensive root system. Unfortunately, the property that makes the grass so hearty is also what negatively affects the animals that graze it.

Kentucky 31 contains an endophyte fungus which produces alkaloids that allow the grass to survive and thrive when most other grasses would not. It helps the grass to stand up well to heavy grazing pressure as well as drought, disease and insects. These same alkaloids also cause a number of health issues in the animals that eat it. Vasoconstriction is the most common and perhaps the most serious side effect of grazing Kentucky 31. The constriction of blood vessels can cause poor thermoregulation (including heat stress), loss of extremities due to poor circulation, low feed intake and rate of gain, low birth weight and weaning weight, birthing problems, poor reproduction and poor milk production in all livestock species.

In pregnant mares, there are a whole host of reproduction related problems that are caused by fescue toxicosis. Abortions may occur around the time the mare is expected to foal. She may have a prolonged gestation period, sometimes by as much as 30-40 days, which can cause major birthing issues due to the foal continuing to grow over the additional days of pregnancy. Thickened placenta and retained placenta can be caused by fescue toxicosis. Most commonly however, is agalactia, or poor milk production, as previously mentioned. Agalactia is a serious problem that likely won't be recognized until the foal is in danger of starvation. Since we cannot see how much if any milk the mare is producing, we just assume that the baby is getting enough nutrition until it begins to show signs of malnutrition.

These are obviously major issues that we want to avoid, so most farms with broodmares either avoid fescue all together or do their best to manage their livestock on it. In the past, the recommendation was to replace the Kentucky 31 with an endophyte-free variety of tall fescue which almost always ended in a

failure of establishment since the endophyte is what makes the grass so hearty. In recent years, however, there have been several different varieties of tall fescue developed that contain an endophyte, but not the endophyte that is toxic. We call this novel-endophyte fescue. This gives us the best of both worlds, a hearty, nutritious grass that we do not have to worry about letting our animals graze. Replacing toxic fescue with a novel-endophyte fescue is the most recommended management tool. Converting your toxic fescue pastures to novel-endophyte pastures is a long term project, but there are multiple options to do so and can be accomplished relatively easily. Contact your local extension office or Soil and Water office to find out how to get started.

If completely renovating your pastures is not something that seems like an option for your farm, dilution can make a difference in toxicity levels. You can dilute the Kentucky 31 by overseeding with legumes or another cool season grass such as Orchardgrass or Brome. This will at the least cut down on the amount of toxic fescue that your horse is ingesting. The last management tool is to remove the pregnant mare from the tall fescue pasture during the last 60-90 days of gestation. This means either putting her on a pasture composed of another variety of grass or dry-lotting her. In either case, she should be closely monitored for signs of fescue toxicity. This is the least recommended and least effective form of management, but is still better than no management.

If you think you may have fescue toxicity issues on your farm, you should contact your vet. Getting a management plan together by working with your vet and your local Extension Agent is key to finding what will work best for your farm.



Horse Blog: The blog has articles on horse management, nutrition, health care, reproduction and other topics every week. The link is <http://nchorse.blogspot.com>

Managing the Impacts of Parasite Infections in Sheep and Goats

By: Liz Lahti, Livestock Extension Agent with N.C. Cooperative Extension in Cumberland and Hoke Counties

It won't be long before it's hot and humid in the south, which is the perfect conditions for internal parasites to thrive. Internal parasite infections can affect the productivity of grazing animals. Animals with clinical signs are easy to spot with their rough hair coat and overall poor condition; while those animals with sub-clinical signs are harder to find. Sub-clinical infections are much more common and could result in greater loss of production, because they are not showing obvious signs of infection and therefore not getting the treatment needed. There are a number of management tools that are available to help mitigate the impacts of parasite infections.

The barber pole worm is the main internal parasite of concern in the Southeastern US. The barber pole worm infects the abomasum by piercing the wall and causing blood loss which leads to anemia and edema (bottle jaw). Two other internal parasites of concern are the brown stomach worm and the bankrupt worm. The brown stomach worm also infects the abomasum and decreases the availability of nutrients by decreasing feed intake. The bankrupt worm infects the small intestine and causes changes in the lining, which leads to a decrease in the efficiency of nutrient absorption. Both the brown stomach worm and bankrupt worm cause inflammation in the gut, leading to scours. The infective larvae of these worms which are in the animal's poop are able to crawl two to three inches up blades of grass where the animals can ingest them while grazing.

Younger lambs and kids, lactating animals with two or three lambs/kids, animals grazing on contaminated pastures, and animals with poor nutrition are the most susceptible to parasite infections. There are also some breeds that are more likely to be affected by internal parasites. Chronic and moderate infections have been shown to affect feed intake in lambs and kids as well as milk production in does and ewes, resulting in the slower growth of their offspring. Keeping these groups of animals in mind can help when determining the best plan to help decrease the chances for internal parasite infections.

Providing good quality nutrition through each life stage is very important in making sure the animals can perform to their best ability. Good nutrition also helps keep the animal's immune system in good working order, allowing the animal to fight off internal parasite infections more easily. Providing the animals with pasture that is taller than two to three inches will help decrease the amount of larvae that are ingested. Incorporating rotational grazing can help with this because it allows the grass in one pasture to rest and grow while the animals are put onto another pasture that has tall grass.

Providing brush for goats can also help because they are eating up higher than the larvae can crawl.

Allowing the more susceptible group of animals on new pasture first can also help decrease their risk because there will be less of a parasite load on that land. Plants that are higher in tannins, such as sericea lespedeza and chicory, has been shown to lessen the effects the worms can have on an animal. Incorporating these into your pasture or feeding it as hay is an additional step you can take to help limit the impact of internal parasite infections.

There are breeds that have more natural resistance to the impacts of internal parasite infections.

These breeds can be incorporated into herds to help manage the effects of internal parasite infections. Those breeds include Savanna, Kiko, and Spanish goats and Katahdin, Dorper, and St. Croix sheep.

Two other tools that are available are FAMACHA and fecal egg counts. FAMACHA is a system that determines the worm load of the barber pole worm based on the degree of anemia the animal is displaying in the inner lower eyelid. Using this system allows you to pinpoint the individual animals that need to get treated instead of treating everyone and increasing the chance of chemical resistance in the parasites. FAMACHA requires certification which trains how to best utilize the system and you receive the card that is needed for accurate identification. Fecal egg counts also helps pinpoint individual animals with heavier worm loads, but instead of looking at eyelids you look at the number of worm eggs in the poop. The number of eggs that are present determines if you need to deworm or not. Fecal egg counts can be done by producers, veterinarians, or your Extension agent.

Contact your local Extension agent for more information on the things mentioned in this article.



Regional Chicken Project

By: Taylor Chavis, Livestock Extension Agent with N.C. Cooperative Extension in Robeson County

Chickens are fun and easy to raise. They don't require a lot of food and can be kept in a small space. Kids seem to love chickens and because of their popularity, there were two Regional 4-H and FFA chicken projects in which youth could participate in Eastern, NC.

Our Regional Chicken Projects are divided into two regions. For the counties north of I-40, the Coastal Plains Chicken Project and for the more southern counties, we have the Southeast Regional Chicken Project. We also gave youth the option of choosing two different types of chickens, laying hens and broilers. Those that chose laying hens received 5-10 day old chicks in February and raised them until show time. Those that chose broilers received them in early March and kept them for 6 weeks until show time.

On April 26, the participants in the southern counties brought their birds to the Regional Chicken Show at the White Lake FFA camp. The show for the Coastal Plains Chicken Project will be held on May 1.

Three areas of competition were judged including showmanship which is the handling of the bird and being able to verbally share their knowledge about the anatomy and breed to a judge; breed which the judge compares the overall look of the bird including fullness, color, health, etc. in comparison with the other birds of its same breed; and project record books, which is a written record of knowledge gained and evidence of learning through the project. Fifty-three kids showed representing Bladen, Brunswick, Columbus, Cumberland, Hoke, and Robeson Counties. Recognition and ribbons were given to all Cloverbuds ages 5 to 8 for their participation in showmanship and record books.



Backyard Chicken DIY Projects

By: Margaret Ross, Area Poultry Agent with N.C. Cooperative Extension

If you have ever considered getting chickens, but are worried about how much they may cost your family, there are lots of do it yourself (DIY) projects you can do to cut down your expenses and get exactly what you want. You can make your own coop, chicken tractor, waterer, and much more. Here are some tips to consider when taking on a chicken DIY project.

Chicken Coops / Tractors: What is a chicken tractor? Basically, it is a mobile coop. It allows you to move your chickens around your yard in an easy and quick fashion, allows your chickens to constantly have fresh grass and insects, reduces your pest population and helps fertilize your yard. A chicken tractor can be a great asset to your farm if it is easily moveable. You can make any chicken coop into a chicken tractor by adding wheels and handles (wheel barrow-type handles work great). Many folks use old dog houses (or even play houses) as a starting point for chicken coops because they are enclosed and safe and all you have to do is add in a roosting bar and nesting boxes.

When building or retrofitting a structure to a chicken coop or tractor, consider spacing requirements for your chickens. They need a minimum of 2.5-3.5 square feet per bird of inside coop space plus an additional 4-5 square feet of outside fenced in run space. If you make your own chicken coop, don't forget to add a run for them to have time outside to exhibit their natural behaviors like scratching in the dirt for insects and taking dirt baths to rid of mites and external parasites. When designing your run, don't forget to cover the top of the run with chicken wire or a solid roof if possible to keep aerial predators out. Also, be cautious of ground predators as you may need to add additional precautions such as chicken wire under the ground to stop them from digging under the fence to get into the chicken run. Other

management aspects to consider are protection from the weather, proper ventilation (cool in the summer and warm in the winter), adequate nesting boxes (at least one per 4-5 hens and at least 12" x 14") and adequate roosting space (minimum of 9"-10" of perch space).

Chicken Waterers: There are lots of ways to water your chickens and you can purchase inexpensive waterers from any local feed and seed store. If you're interested in filling up waterers less and having cleaner water, you can make a waterer. One option for doing this is by using a large PVC pipe and adding drinkers to it facing down, every foot or so. Be sure one of your caps on the end of the PVC pipe waterer curves up so you don't have to worry about water leaking out and that it is easy to open, close, and refill with water. You can supply your chickens with a large amount of water by using a waterer like this and it also keeps the water clean and free from dirt, leaves, and manure from the chickens- they like to use traditional waterers as perches and often dirty their fresh water very quickly. Be sure to mount this waterer close enough to the ground for the chickens to drink from it. The PVC pipe waterer works best if you start them out on it when they are chicks. Be sure the waterer is secured to the coop or the structure you're putting it on, and make sure a hose from your water source will reach the waterer. You can also make various different types of waterers out of 5-gallon buckets.

If you have any questions about how to do any of these DIY chicken projects, you can contact your local Cooperative Extension Office and speak with the livestock agent or myself at Margaret_Ross@ncsu.edu.

