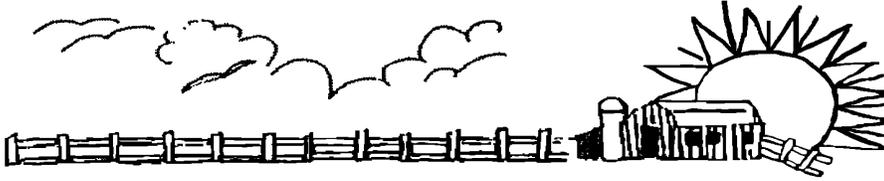


# FENCELINES



## Inside This Issue

1. Important Information
2. Animal Waste Educational Opportunities
2. Animal Waste Management News
3. Pasture Renovation Considerations
4. What should I do with my calves?
5. Bot flies are buzzing
6. Goat adaptability and the beauty and usefulness of things untouched by man
7. NC Youth Livestock Showmanship Circuits
8. Protect livestock from hot temperatures
9. Cost Share Programs for Riparian Buffers
9. Forage Management Tips

## Important Information

### Upcoming Events

- ◆ July 23rd - Beef Field Day at CEFS (Center for Environmental Farming Systems) please call to register
- ◆ July 28th - 30th - Youth Livestock Competitions
- ◆ August 9th - Sire School Kenansville 4 to 7 pm

### Hay Field Day July 14th

Hay Field Day at Ronnie Hutchinson's Farm on Thursday, July 14 from 2 - 5:30 pm. Rain date is July 15. Register by July 12<sup>th</sup> by calling the Bladen Office at 910-862-4591.

- **2 hours of animal waste** (must attend 2-4pm)
- **1 hour of X pesticide credit** (must attend 2-3pm) *have been applied for.*

Directions: Go 3.5 miles South on NC Hwy 87 from 87/701 Intersection and hay field will be on the left side of road before you reach 3874 NC Hwy 87, Elizabethtown, NC 28337.

### Beef Cattle Field Day July 23rd in Goldsboro

Join us for a statewide beef cattle field day to be held at the Center for Environmental Farming Systems (CEFS) in Goldsboro on Saturday, July 23. Registration begins at 7:30 am and the first tram tour will leave at 8:45 am. Topics include adding value to the calf crop, weaning management, soil health,

## July & August 2016

grazing management, silvopasture, warm season annual grasses, genetics, mineral programs, and fly control strategies. A lunch keynote speaker will discuss solar farms and their impacts on agriculture in North Carolina. Following lunch there will be an optional BQA session with information concerning anaplasmosis and bovine leucosis virus in cow herds, as well as important updates to the BQA program. BQA certification will be available at this event. The optional BQA session is scheduled for 1:00 – 2:30 pm to end the day.

### Sire School August 9th

Join us the evening of Tuesday, August 9, 2016 from 4 until 7 pm at the Duplin County Cooperative Extension office for Sire School. The purpose of this event is to promote North Carolina bulls and breeders to North Carolina cattlemen. At the school, breeders are encouraged to register for a table (\$20 – can be split amongst multiple breeders if desired) and display any information relating to their offerings, whether it is bulls on test with the Beef Cattle Improvement Program State Bull Tests, farm dispersal sales, or any other marketable bulls they may have available. If you have any questions, please contact Adam Ross at [adam\\_ross@ncsu.edu](mailto:adam_ross@ncsu.edu) or 910.296.2143, or Eve Honeycutt at [eve\\_honeycutt@ncsu.edu](mailto:eve_honeycutt@ncsu.edu) or 252.521.1706.

### Pesticide Classes Wayne County Classes at the Extension Office.

- ◆ **September 14th (time TBA)**  
2 hours of V credit  
2 hours of X credit

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

Stefani Garbacik  
Extension Agent, Livestock  
[Stefani\\_Garbacik@ncsu.edu](mailto:Stefani_Garbacik@ncsu.edu)

Check out our new website  
[www.waynecountyag.com](http://www.waynecountyag.com)

New Animal Waste Operators Class & Continuing Education Opportunities		
July 12th, 2016 3 to 4 pm	Duplin County Extension Office Kenansville	Call (910) 296-2143 to register
July 13th, 2016 3 to 4 pm	Center for Environmental Farming Systems Goldsboro	Call (919) 731-1525 to register
August 5th & 6th, 2016 Starting at 9:00 both days 10 hours	Lenoir County Extension Office Kinston Cost for the class and manual is \$30.00 \$25.00 to WPCSOCC for the exam	Call (252) 521-1706 to register

## Animal Waste Management News

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



### Soil Sampling Frequency for Swine Farms

There was a change in legislation in 2012 regarding soil sampling on swine farms. **The soil testing frequency stated in G.S.143-215.10C(e)(6) has been changed from annually to every three years.** Many farms need to take soil samples this year (2016). If you did a soil test in 2015, then you are good until 2018.

### Waste Sampling

Don't forget that regulations require waste sampling be performed within 60 days of a waste application either before or after.

### Storm Warning Permit Information

General permit conditions have a land application rule in regards to a Hurricane Warning, Tropical Storm Warning or a Flood Watch. **Section II 22.** Land application of waste is prohibited during precipitation events. The Permittee shall consider pending weather conditions in making the decision to land apply waste and shall document the weather conditions at the time of land application on forms supplied or approved by the Division. Land application of waste shall cease within four (4) hours of the time that the National Weather Service (NWS) issues a Hurricane Warning, Tropical Storm Warning, or a Flood Watch associated with a tropical system including a hurricane, tropical storm or tropical depression for the county in which the facility is located. Watches and warnings are posted at [www.weather.gov](http://www.weather.gov) or by calling your area NWS office.

### Calibration and Sludge Surveys

All farms are required to calibrate their irrigation equipment and perform a sludge survey. General Permit Farms are required to calibrate at least once every two years and perform a sludge survey every year (unless an extension from Division of Water Resources was granted). NPDES farms must complete both every year.

### Temporary Adjustments in Lagoon Stop Pump Level:

The NRCS Technical Guidance Document allows an optional, temporary adjustment in the lagoon operating procedure. This adjustment allows the operator to pump into the top 8 inches of the treatment volume from June 15th through October 31st to provide irrigation water during drought periods to establish/maintain vegetation in application areas and allow additional temporary storage for excessive rainfall during the hurricane season and winter months. There are several restrictions to the rule. For more information, call your Extension or NRCS Office.

### Animal Waste Continuing Education Credit and Private Pesticide License Hours

Cooperative Extension offers continuing education for animal waste and pesticide certification. People with an animal waste Operator in Charge (OIC) license have three years to get their six hours of continuing education credit. You can call your Extension Agent to check your hours. You will receive your invoice in October from the Water Pollution Control Systems Operator Certification Commission with the NC Department of Environmental Quality. The \$10 fee is due by December 31st.

The North Carolina Department of Agriculture and Consumer Services is responsible for pesticide certification program. Their website look has changed recently. To check your pesticide credit, go to <http://www.ncagr.gov/aspzine/str-pest/pesticides/Recert/RTsearch.asp> and type in the name of the applicator or search by license number. Click "Find Record" and scroll down to find the correct name and click on the name and hit "search." Click on "check credit status" to see a list of the classes you have taken, the deadline on your hours and hours you need for your license. If you have more than one license, make sure you check all pesticide applicator numbers.

*Call your Extension Agent for more information.*

## Pasture Renovation Considerations

By: Stefani Garbacik, Livestock Extension Agent with N.C. Cooperative Extension in Wayne County

When making the decision whether or not to renovate an existing pasture, you should take into consideration WHY it needs to be renovated. Is it due to Mother Nature, to management practices, or a combination of both? If the main reason for renovation is mismanagement, keep in mind that unless you are willing to change your management style renovating and replanting is only a temporary fix.

There are two main reasons you may need to renovate and they're often easy to determine by walking around your pasture. A decrease in the overall stand is obvious to the eye in most cases; the grasses tend to clump and you have more bare patches than usual. The other reason would be a decrease in palatable plants; this means that there may be plenty of plants in your pasture but your animals aren't eating them. This may decrease their forage intake since they're unhappy with the forage choices, which decreases their performance. Restricting them to a smaller area and "forcing" them to eat the forage may be an option in some, but not all, cases.

If you're trying to decide if your pasture needs a complete overhaul renovation or you need to just add more plants, determining your stand loss can be a useful starting place. A bermudagrass stand loss of 30% has a high chance of recovery if you can control the weeds, apply fertilizer, and follow recommended management practices. At a stand loss of greater than 70%, there are probably not enough rhizomes left in the pasture for recovery and renovation will most likely be required. Tall fescue, a more bunch type grass, could need renovation at a stand loss of 50% or more. So consider your grass type and management style before you decide to completely renovate a pasture.

During renovation, livestock carrying capacity and forage production will decrease. You may have to supplement feed, move animals to different areas,

or find alternate forage sources than those you would usually find in the pasture. Make sure you choose the right type of forage for your goals; it is important to do your homework and figure out what you need before you start the lengthy process of pasture renovation. Knowing your soil types and getting a soil test done can be a great starting point for this process!

Seedbed preparation is very important in making sure the time and money you are putting into pasture renovation is not wasted. Good seed-to-soil contact is key in making sure the stand is successfully established. Prior to planting, graze the grasses close to the ground or clip forages. Obtain your seed (or sprigs) from a well-known reputable source with a good germination rate. Be sure you have the correct equipment for the seeds you are planting, for example native grass seeds will not flow through a regular grain drill and require specific equipment to be planted properly. Follow up planting with recommended herbicides and fertilization.



One way to improve a mostly grass pasture is to plant legumes, such as clover. The total yield of forage per acre is increased when planted with clovers. Forage quality, in terms of palatability and nutrient content, is also improved, which increases animal performance. Legumes are "nitrogen fixers" which can decrease the need for commercial fertilizers on your pasture. This is just one way to improve and renovate your grass pastures for better production and quality.

Renovating your pastures is a long term investment on your farm and should be treated as such. Once you make the decision to renovate your pasture, be sure to do your homework! It's important to understand what work goes into this and what management practices you may have to adopt but it will be worth it in the end when you see your animals grazing on your new lush, full pasture.

## What Should I Do with My Calves?

By: Adam G. Ross, Livestock Extension Agent with N.C. Cooperative Extension in Duplin County

What should I do with my calves now that the market tanked? This is a question I have received fairly frequently in the past few months as the cattle market has declined steadily. With varying weather and pasture conditions around the region, it is generally not a question to which I have a cookie-cutter answer at the ready.

Industry experts keep punting the ball back and forth as to when the bottom will be found. For some people, they believe the annual summer slump will show us; for others, we may have to wait for fall and election season (that's a whole different ball of twine). One thing is certain, we are in a decline from the tremendous prices we received a year, two, and sometimes three years ago. However, we are still, a little bit at least, doing better than we were earlier this decade. In 2010-2011 timeframe a 500 lb. calf would bring us around \$100-\$110/cwt. Today, that number will be around \$120-\$133/cwt. (data from NC Dept of Agriculture Weekly Weighted Average Market Report June 23, 2016 for 500-548 lb. steers). That means that for that same 500 lb. calf we would have gotten around \$550 in 2011 versus \$665 this year. While that keeps us in decent spirits knowing that we're not going completely down the drain, we need to start thinking about how we retain value in our herds after the bottom is found.

The value-added sales of 5-8 years ago are going to be coming back in full force. Yes, I realize that in 2014 you could take a green calf straight off of mama and send him on to the stockyard – intact, unvaccinated, bawling, and crazy as a loon – and get top dollar for him. But we're not in that market bubble anymore. The order buyer doesn't need your calf this year – we have to make him want it. We do that by the following ways:

- BQA – Beef Quality Assurance certification is the industry standard for top quality calves. There is a consumer-driven push for animal health, welfare, and care taking top priority where beef is purchased. Some feedyards have been hinting that they will be purchasing only BQA certified calves in the future – which can't help but show a bit of a premium for the first few years of trying to fill the yard.
- Defined Calving Season – Without a tight group of calves, we are marketing apples and oranges. Order buyers at the stockyard, or video auction, or pretty much anywhere want to see groups of calves that will go together and finish at relatively close time frames. Economies of scale play here – the more you've got to sell, the better your price will be. If you've got 50 cows that calve 12 months out of the year, you'll be selling teenagers, babies, and everything in-between if you tried to market them in a group. Tighten that season up to 90 days, and you'll have a fairly uniform crop of calves that will be close in age, and the buyer will be happy to take them off your hands.
- Hit The Feed Bucket – This is not meant to be a literal

statement. The feed bucket isn't just what you use to put a bag of feed, or corn, or your own home-mix in; you have acres of feed bucket at your disposal – in your pasture. Utilize annual grasses for weaning pastures to add gain to your calves at a lower cost than full purchased feed. By utilizing pastures, and supplementing with purchased feeds, you can add pounds to the animals and decrease your overhead (remember, lower overhead equals higher profits – nobody can complain about that). You are selling animals by the pound when you go to a stockyard or a video auction, so make sure they hit the scales with a little pressure.

- Be Aware of Input Costs – Utilize your county extension agent and develop a plan to understand your cost of gain. This goes in conjunction with the feed bucket statement. There's no sense in adding weight if the cost of adding it is more than the benefit. For example, a 500 lb. steer at \$1.33/lb. will be \$665. From the same market report a 600 lb. steer at \$1.32/lb. would be \$792. With these figures, we need our cost of gain to be less than \$1.27/lb. – which is easily accomplished when high producing pasture is combined with supplemental feed.
- Understand Your Genetics – Don't think that you can't do better. The name of the game for the cattle industry is continuous improvement. Increasing productivity is top priority. I cannot stress enough that genetics is the basis for getting the most out of your cattle herd. Start with the path of least resistance – your sire. Your bull (or bulls) make up 50% of your saleable product. If we can make quick changes, it's going to start with utilizing high quality bulls. For almost all breeds birthweight is not the only factor to consider when purchasing a new sire. Most breeds now have a handy EPD for calving ease – this factors in not only birthweight, but also number of dystocias and difficult pregnancies. Utilize this number to select a bull that will give you a live calf with the least amount of effort on your part. Birthweight comes into the picture when we start talking about calves. There is a positive correlation in birth, weaning, and yearling weights, in other words, if it's a bigger calf at birth, it will most likely continue to be bigger throughout its life. You don't want a 100 lb. calf, that's understandable. However, in the same line you most likely don't want a 50 lb. calf either. Don't let your calf crop start out behind before they even get a chance to go.

Hopefully the talking heads and prognosticators are wrong, and the cattle market rebounds back to 2014 levels, but with respect to reality, these management tools will help your operation weather the storm of market decline and continue being profitable into the coming months and years.

## Bot Flies are Buzzing

By: Eileen Coite, County Extension Director N.C. Cooperative Extension in Sampson County

If you haven't seen the bot fly buzzing around and hovering over your horse, you might have seen the yellow eggs they left on your horse. The bot fly, which resembles a honey bee, has non-functional mouthparts and does not bite the horse, but can cause significant internal damage to the digestive system. The eggs of the bot fly are what we are more concerned with, since they contain the bot larvae that can be dangerous to your horse's digestive tract. Bot flies usually lay eggs on the horse's legs, flank and belly area, but sometimes even in the mane, neck, chest, throat and other areas. There actually are three types of bot flies: the common horse bot fly (*Gastrophilus intestinalis*), the throat bot fly (*G. nasalis*) and the nose horse bot fly (*G. haemorrhoidalis*). The common and throat bot flies are found throughout the U.S., but the nose bot fly is more common in the northern and Midwestern states. The female bot fly can lay between 150-500 eggs in her 7-10 day life cycle. What's most important is that the eggs are removed promptly, before the horse licks them and the larvae are allowed to enter the mouth and start causing problems.

Bot eggs require two things to hatch: friction and moisture. The horse provides both of these if they lick or scratch an area with their mouth. The small bot larvae will attach to the horse's tongue, burrowing into the tissues of the mouth. Some of the bot larvae found closer to the head will even emerge and migrate on their own without the horse's help. It takes about one to five days for the egg to incubate before hatching, so its best to remove the eggs as soon as you see new ones on your horse. After about three weeks, they will leave the mouth area and travel to the stomach and the upper portion of the small intestine. The cycle is complete when the fully grown larvae pass through the horse feces and burrow in the soil to pupate, then emerge as flies after a couple months.

Damages caused by bot larvae can be extensive. Horses may lose weight due to the inability to graze because of the pain in their mouth from the burrowing larvae in the tongue, gum, or lips. They may rub or bite at objects to relieve pain from the burrowing and injure themselves. In the stomach, the larvae can cause obstruction of the flow of food, colic, or even perforations of the stomach or small intestine wall. Ulcers, peritonitis, esophageal paralysis, and even rupture of the stomach can occur in very severe cases.

Controlling bots is not hard, but routine inspection for eggs and frequent removal is required to minimize their effects. Breaking the life cycle is the key. Sponging affected areas of the horse with warm water will cause the eggs to hatch, and including an insecticide with the water will kill any eggs exposed once hatched. If you'd rather not use them, a quick method of removal is to either use a bot knife or clip the area. Oral treatment and in most cases prevention of the horse from bot infestation is done through certain deworming products. Dichlorvos, ivermectin, trichlorfon, and moxidectin are all effective for bots. It is recommended to deworm both in the late summer and immediately after a killing frost for best results.

*Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage and examine a current product label before applying any chemical. For assistance, contact an agent of the North Carolina Cooperative Extension in your county.*

## Goat Adaptability and the Beauty and Usefulness of Things Untouched by Man

By: Brian Parrish, Agriculture Extension Agent with N.C. Cooperative Extension in Harnett County

A few years ago my family vacationed at Murrells Inlet located about 15 miles south of Myrtle Beach SC. As part of our vacation rental we received a week long beach pass to Hunting Beach State Park, a 2,500 acre park with 3 miles of beaches that are untouched by man. I personally love spending time at beautiful places like this and highly recommend a visit. Then across on the other side of Ocean Hwy we visited the beautiful 9,100 acre Brookgreen Gardens. The gardens also have a zoo with an emphasis on rare and endangered livestock breeds. At the zoo area I noticed some goats that looked like the goats my Grandpa used to clear brush and basically weed eat around the farm. I remember my grandpa's Spanish goats as being very tough, hardy, and easy keeper animals. I learned that these Spanish goats at Brookgreen Gardens came from a South Carolina island where they had been living wild, untouched by man, in a challenging environment for over 40 years. There were about 100 goats on this island 30 years ago and that number had dropped to less than 30 goats a few years ago due to predators (wild hogs and gators) and inbreeding. The Livestock Conservancy based out of Pittsboro, NC worked to help rescue and preserve this unique genetic resource. The SC population is unique because it is one of only two known purebred strains of Spanish Goats adapted to the hot humid subtropical Southeast Environment. This SC population of Spanish Goats is known as the lowcountry line and is expected to have a very high degree of adaptability and natural resistance to parasites. The Baylis line from Mississippi is another Southeast Spanish Goat strain according to the Spanish Goat Association webpage. Like the Baylis line, the Lowcountry line are a little smaller than some Spanish Goat lines. The bucks average 90 pounds and the does average 70 pounds with nannies typically giving birth to twins twice per year. The Livestock Conservancy continues to work with Brookgreen Gardens and other satellite breeders to secure these animals and their genetics for future generations.

Dr. JM Luginbuhl (NCSU Extension Specialist Goats and Forage Systems) has this to say about goat adaptability in a NCSU fact sheet he authored in 2015 entitled Breeds and Production Traits of Meat Goats.

### “Adaptability”

“This trait is the most important of all the production traits. The profitability of any meat goat enterprise may

be greatly diminished if an animal's ability to survive and reproduce is impaired by the production environment. The goat has proven to be perhaps the most adaptable of all the domesticated livestock. Indeed, the goat survives worldwide in a wide range of environmental conditions. However, when taken out of one environment and placed into another, domesticated livestock of any species may not always realize its production potential.” Dr. Luginbuhl also states, “Adaptability is a lowly heritable trait because natural selection has already reduced the genetic variability. Therefore, adaptability will respond slowly to selection”

It is interesting to note that the Kiko breed of goats was developed over two decades of intensive selection from New Zealand feral, untouched by man, goat stock and dairy breeds. Obviously, adaptability for their climate was one of the important characteristic that New Zealand goat breeders wanted the Kiko breed to have.

I'm not trying to promote one breed over another in this article but I feel it is important to realize that no one breed of any animal is going to the best at everything. I also feel it is also important to realize that there can also be a lot of variation within any breed (high and low performing animals). I encourage new goat producers to start out with goats that are adapted to our area of the Southeast. If new goat producers are not planning to sell purebred goats as breeding stock, I also encourage them to purchase crossbred goats or use crossbreeding as a tool. Through crossbreeding goat producers can take advantage of breed traits such as; reproduction rate, growth rate, carcass characteristics,



adaptability and heterosis. Heterosis or hybrid vigor is the improved or increased function in a hybrid offspring compared to the average of the two parents.

References: The Livestock Conservancy, The

Spanish Goat Association, Dr. JM Luginbuhl (NCSU Extension Specialist Goats and Forage Systems)

Photos courtesy of The Livestock Conservancy

## NC Youth Livestock Showmanship Circuits

*By: Dan Wells, Livestock Extension Agent with N.C. Cooperative Extension in Johnston County*

Showmanship circuits consist of multiple shows at various locations and dates across a region. In North Carolina there are four showmanship circuits: Eastern Carolina Showmanship Circuit, Carolina Youth Meat Goat Showmanship Circuit, 4-H Farm Credit Showmanship Circuit and Carolina Swine Showmanship Circuit. Each has different rules and procedures, but the concept behind all is that each circuit has several participating shows, and a child may compete in as many of the shows as he/she likes. Awards are given for each individual show, but participants also become eligible for circuit awards by competing in a minimum number of the shows. Winners are recognized at the NC State Fair or at a year-end banquet (Farm Credit Circuit.) Following is a bit more information about each circuit. Even if you don't have children showing, please consider attending and supporting a show in your area.

**Eastern Carolina Showmanship Circuit:** This program was started in 1992 and is for youth showing lambs and heifers. There are 9 shows in the circuit, and participants who compete in 4 shows receive a circuit tee shirt and are eligible for year-end awards.

**Carolina Youth Meat Goat Showmanship Circuit:** This circuit consists of eleven shows. Participating in 4 of the shows qualifies an exhibitor for a tee shirt, 6 shows qualifies for circuit awards. More information at [lenoir.ces.ncsu.edu/content/CarolinaYouthMeatGoatCircuit](http://lenoir.ces.ncsu.edu/content/CarolinaYouthMeatGoatCircuit)

### Eastern Carolina and Carolina Youth Meat Goat Circuits Dates

County	Goat Show	Lamb Show	Heifer Show
Alpha Gamma Rho (Johnston County)	August 12	August 13	August 13
Halifax County	August 20	N/A	N/A
Sampson County	N/A	August 20	August 20
Carteret County	August 27	N/A	N/A
Albemarle Area	September 2	September 3	September 3
Edgecombe Co.	September 9	September 10	September 10
Greene County	September 10	N/A	N/A
Duplin County	September 16	September 17	September 17
Lenoir County	September 23	September 24	September 24
Wilson County	September 24	September 23	September 25
Pitt County	September 25	September 22	September 20
Wayne County	September 30	October 1	October 2

**4-H Farm Credit Showmanship Circuit:** This circuit is sponsored by Carolina Farm Credit and Cape Fear Farm Credit. More information, including rules and registration forms, can be found by going to [richmond.ces.ncsu.edu](http://richmond.ces.ncsu.edu) and clicking on "Farm Credit 4-H Showmanship Circuit." The recognition banquet will be on November 18 in Pittsboro.

**Carolina Swine Showmanship Circuit:** There are seven shows in this circuit, with belt buckles awarded to the top showman in each age division. More information can be found at [facebook.com/ncswineshow](https://www.facebook.com/ncswineshow)

### Carolina Swine Showmanship Circuit Dates

County/Date	County/Date
Albemarle Area - September 3	Edgecombe County - September 10
Duplin County - September 15	Wilson County - September 20
Lenoir County - September 21	Wayne County - September 29
Sampson County - October 4	

## Protect Livestock from Hot Temperatures

By: Tiffanee Conrad, Livestock Extension Agent with N.C. Cooperative Extension in Richmond County

The temperature has really been hot this summer! Its important during this time for farmers to think about some very important points to protect their livestock. You need to provide appropriate shade against the sun and ensure they have access to cool, clean water. It is also important to consider factors such as the animal's size, age, health and thickness of hair. Some animals are more vulnerable to hot temperatures than others. Particular care should be taken with older animals that sometimes have a harder time with heat. Livestock can get very overheated, dehydrated, and possibly die from extreme temperatures.

Since dehydration is such a huge risk for livestock in really hot weather, farmers need to make sure they have plenty of fresh water. Ice and/or frozen water bottles can be floated in water to cool it down. Make sure when filling water buckets and troughs up that you run the water hose a few seconds until it runs cool. Most water sitting in the hose gets heated up from sitting in the sun. Water intake during hot weather increases significantly. A 1300 lb cow can drink 25 gallons of water on a hot day. Also, please remember that livestock don't eat as much feed during hot weather.

Animals that regularly live outside can handle hot weather if they have proper shelter and water. They need a shelter that is tall enough to allow wind movement.

Putting a tarp over a short dog pen can do more harm than good by creating a sauna-like environment. For shade, think about when your family goes to the beach all day. You need to get out of the sun for a few hours to get a break. Animals are the same way. They can also get sunburned just like we do, especially pigs that have little hair.

Trees and some shrubs can provide good shade for livestock, just think about where the shade is during different times of the day to make sure they have good access to it. You'll also need to think

about what type of trees you have. Some trees provide better shade than others because of their thick leaves and branches. Hardwood trees are normally good shade providers. Pine trees with tiny needles may not be adequate unless you have several of them bunched together. One downside to having trees as shade instead of a shelter is that livestock can kill them over time from rubbing on them. Also, animals stepping on top of the soil around the trees can cause erosion of the root system which can cause them to be weak or die.

Animals kept in stalls, such as horses, may also need fans to help them cool off. Reducing the temperature lowers animal stress, improves animal health, and increases feeding efficiency. Clipping their hair can also really help livestock lose the heat from their bodies during the hot summer months.



You also need to think about when you work your livestock. It's good to work them during the morning hours when it is cooler. You never want to stress your animals out while sorting them in pens and running them through chutes. This becomes very critical during hot, humid weather. You can watch the weather forecast and work livestock on days that may be a little cooler if you have some flexibility. Also, when transporting livestock on trucks

and trailers, its better to move them early in the morning or at night to prevent heat stress. With a few preparations, you can prevent unnecessary death in your livestock herd, increase the productivity of your operation, and keep your livestock safe. If you have questions about keeping livestock cool during the summer, please call your local Livestock Agent.

## Cost Share Programs for Riparian Buffers

By Katie Stevens, Wayne County Soil & Water

**What is a Riparian Buffer?** It is an area of perennial, long-lived vegetative cover (grass, shrubs, trees, or a combination of vegetation types) established adjacent to and up-gradient from water-courses or water bodies to improve water quality. Benefits may include reduced soil erosion and nutrient delivery, sedimentation, pathogen contamination and pollution from dissolved, particulate and sediment-attached substances.

**Why is it useful?** Benefits may include reduced soil erosion and nutrient delivery, sedimentation, pathogen contamination and pollution from dissolved, particulate and sediment-attached substances.

**How can Soil & Water help?** If you are interested in incorporating riparian buffers into your farming operation, come into the office where a staff member can help you sign up to be eligible for a cost share contract.

### Office updates

The office staff would like to congratulate Andy Miller for his twenty-three years of outstanding service. Andy has been a great asset to the Wayne County Soil & Water Conservation office serving as lead Soil technician and cost share technician. Best wishes on your retirement!

The USDA is an equal opportunity provider & employer



208 W. Chestnut Street  
Room 104  
Goldsboro, NC 27530  
(919) 734-5281 Ext. 3



## Forage Management Tips

### July

- Stick to a four to six week schedule of nitrogen applications on summer grasses. Do not delay application because of dry weather unless it has not rained at all since the previous application.
- Maintain harvesting frequency for quality hay.
- Hot, dry weather can result in nitrate poisoning of animals grazing stunted, highly fertilized summer annuals.
- Sample soils and apply lime on fields to be planted in the fall, if not already done.
- Decide which fescue pastures will be stock-piled for winter grazing.

### August

- Sample soils and apply lime to pastures with pH below 5.8 to be overseeded next month.
- Fertilize warm-season grasses.
- Fertilize fescue and keep cattle off of the pastures to be stockpiled for winter grazing.

