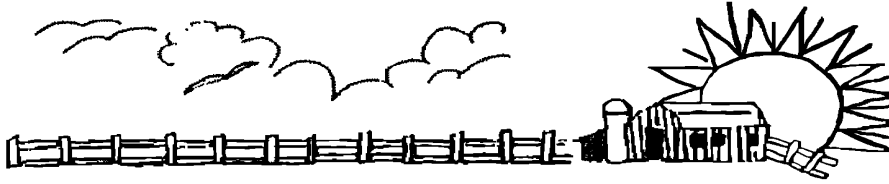


# FENCELINES



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January & February 2016

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

Stefani Garbacik  
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For any meeting in this newsletter, persons with disabilities and persons with limited English proficiency may request accommodations to participate by contacting the Extension Office where the meeting will be held by phone, email, or in person at least 7 days prior to the event.

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## Regional Chicken Project for Youth

The Regional Chicken Project is an opportunity for youth in FFA and 4-H to learn more about poultry. Youth raise hens or broiler chicks and complete a project record book. In May, youth will participate in a show to demonstrate their knowledge of the bird. Training for this will be provided through workshops. At the end of the project, the youth can donate their broilers to process for local food pantries or keep for their own processing. The hens can be kept for egg production or sold. Laying chick delivery will be mid February and broiler chicks delivery will be late March. Registration forms and money are due by January 14th. If you have kids or grandkids that are interested, contact your Livestock agent for more details.

## Cape Fear Regional Cattle Conference

The seventh annual conference will be held on **February 2nd at the Southeastern N.C. Agricultural Events Center in Lumberton**. The conference starts at 4:30 pm and costs \$5 pay at the door. Speakers include Dr. Harrison Dudley, NCSU Vet School and a producer panel on marketing. The program includes a meal and time to visit the vendors. Call the Robeson County Extension (910) 671-3276 by January 26th to register.

## Hay Directory

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. It lists people selling hay or looking for hay to buy. It is free to list your hay.

## Southern Farm Show February 3 - 5 in Raleigh

## NC Pork Council Annual Meeting February 4-5 in Raleigh

## NC Forages and Grasslands Council Winter Conference

February 16th at 10 am in Kenansville. Topics include Managing Bermudagrass Based Forage Systems, Producing High Quality Harvested Forage and Utilizing Forages in Waste Management Systems. Costs before February 8th are \$45 (includes 2016 membership) or \$55 at the door or after February 8th. Register online at <http://www.nccattle.com/fgcwinterconferenceregistration.aspx>

## Wayne County Cattlemen's Meeting February 18th at 7 pm at the Wayne Regional Agricultural Fairgrounds

Topic: Spring Grazing

## NC Cattlemen's Association Meeting February 26-27 in Hickory

**Peak-season Soil Testing Fee**  
NCDA charges \$4 fee for all soil samples processed by the lab until March 31st.

## Pesticide Continuing Education

- ◆ March 9th 10 to 12 noon - V credit
  - ◆ March 9th 1 to 3 pm - X credit
- These classes will be offered at the Wayne Center, please call (919) 731-1527 to pre-register.

**NC** State University  
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### Temporary Modifications to Overseed Pan Rate

By: Taylor Chavis, Livestock Extension Agent Robeson County

Due to recent heavy rain fall events in North Carolina, many animal waste operations have and are currently faced with the challenge of maintaining appropriate freeboard levels in waste lagoons. In order to help assist animal operations, the Division of Water Resources (DWR) will allow a **one-year temporary modification of waste application rates for Bermudagrass fields oversown with winter annual forage**. This modification will allow farms that currently operate under a 50lb/acre PAN rate on oversown winter annual forage to increase to 100lb/acre PAN rate on oversown winter annual forage. The modification will also allow farms that currently operate under a 100lb/acre PAN rate, under limitations, to waive the split application window that is normally required. Farms operating under either system may choose to accept the terms of the one-year temporary modification or remain under the prescribed management plan.

Farms that choose to implement this modification, should follow the conditions below in order to avoid violation of their animal waste permit:

1. The temporary waste utilization plan modification should be documented by a certified technical specialist. Records should be maintained. Contact a technical specialist with your Integrator, Extension, NRCS, SWC or a consultant to update your plan to include this one year modification.
2. Farms that choose to operate under this modification are certifying that a winter annual forage has been properly planted and come up.

3. Bermudagrass fields oversown with winter annual forages will be allowed to convert for **one winter** from 50lb/acre PAN rate to 100lb/acre PAN rate.
4. The split application window normally required for the 100lb/acre PAN rate will be waived under the following limitations:
  - a. PAN applied during December and January will be limited to 25lb/acre.
  - b. PAN applied after February 29 shall be charged against the PAN rate allowed for the Bermudagrass component of the system.
5. Winter annual forage must be adequately grazed or harvested in order to avoid suppressed effects on the Bermudagrass.

**\*\*If the Operator in Charge (OIC) has already applied the standard allowance of 50lb/acre PAN, by January 31, an additional 25lb/acre PAN could be applied. An additional 25lb/acre PAN could also be applied after January 31 and be charged against the oversown winter annual.**

**\*\* The OIC should agree to either graze or harvest the winter annual to a non-competitive height by April 15 if PAN is applied after February 29.**

This modification is in effect for ALL North Carolina Counties for the 2015-16 oversown winter annual crop. If there are any questions, please contact your local livestock agent.



#### Animal Waste Continuing Education Classes

Date and Time	Location	Contact to Register
January 15th 6 hours @ 9 am	Anson County Extension Office Wadesboro	(704) 694-2915
January 21st & 22nd 6 hours	Bladen County Extension Office Elizabethtown	(910) 862-4591

#### New Animal Waste Operators Class

January 21st & 22nd (Snow dates 28th & 29th) 10 hours	Bladen County Extension Office Elizabethtown Cost for the class and manual is \$35.00 or \$5.00 if you have a manual.	(910) 862-4591 or becky_spearman@ncsu.edu
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## Winter Pasture Management

By: Zack Taylor, Agriculture Extension Agent Lee County

Decisions made this winter, while pastures and hayfields are dormant, can make a big difference in forage quality during the spring, and the ability of that forage to survive if hot dry weather hits this summer. When many of us think of the time to fertilize, the first thought is spring and fall. This is true if the pasture or hayfield needs nitrogen. Nitrogen is highly mobile in the soil, so applications are best made when plants are actively growing, and able to use that nitrogen before rains can leach it from the soil and out of the root zone. Many other nutrients, such as phosphorus and potassium, actually need some time to break down and become available before plants can use them. This makes winter an excellent time to make those types of applications. The same rain and snow events we tend to experience this time of year which would leach nitrogen, will help to break down broadcast applications of phosphorus and potassium, which have limited mobility in the soil. This allows those nutrients move into the root zone, where they will be available in the spring when growth resumes and the plant begins to need them again. It is also a great time to apply lime, where it is needed, for the same reasons. Agricultural lime requires a series of reactions in the soil before soil pH is reduced. A properly limed soil will improve the availability of nutrients, leading to less plant stress and healthier pastures. Remember though, there is no rule of thumb concerning how much lime or fertilizer will be needed in a given year, so make sure applications are based on soil test results.

There is a good rule of thumb for another important consideration though, and that is how much forage can be removed while the plant is dormant. The general guideline here is to take half and leave half. Removing more than 50% of plant material will result in stress on the plant. This will open the door to freeze damage, as well as disease and reduced growth in the spring. Make sure to keep an eye on pastures and move livestock as needed to prevent over grazing of dormant grasses. Before grazing a pasture, scout it using a grazing stick to see how much forage is available. This will help you determine how much available forage you have, how long you can graze it, and how much additional hay you may need. Measuring will also give you a better idea of where that halfway point is.

With wet weather, another important consideration is soil compaction. This can result in tractors or equipment moving over saturated ground, perhaps when making those fertilizer and lime applications. The most significant source of soil compaction in pastures can come from hoof pressure when animals are allowed to graze over heavily saturated soils. Soil compaction leads to reduced root growth and lower rates of water infiltration, which can lead to increased runoff and erosion. Animal hooves on saturated ground can also crush plants and destroy roots, which will cause areas of reduced plant growth, leaving room for weeds to fill in those gaps. Not only that, but walking in those sticky, muddy situations is difficult for animals too. This increases their nutrient demands, which can in turn lead to feed and hay shortages. It is a good idea to limit pasture access when soils are saturated to help alleviate these issues.

Speaking of weeds, winter can be an excellent time to start scouting. Many of the common pasture weeds are winter annuals which grow as basal rosettes. These weeds begin their life cycle in the fall as a small basal rosette, which germinated by taking advantage of a weakened forage at the end of a harsh summer. They then enter dormancy during the colder months, and break dormancy in the spring, beginning to grow upright and flower. The best time to control these is in the fall before they get too big, but with the amount of rainy days this fall, there were few opportunities to spray. Control during the winter months is usually out of the question, since while the plant is dormant, there will be no, or limited, herbicide uptake. Take this time to walk your pastures and look for these weeds. Mark problem areas with a flag, or make notes of paddocks where there are heavy infestations. When spring returns, these plants will begin to grow again, and an effective herbicide application can be made if caught early enough. Check with your extension agent for help identifying weeds and choosing the right herbicide for the job.



## Controlled Breeding/Calving Seasons - Is it For Everybody?

By: Randy Wood, Livestock Extension Agent Scotland County

In my years of working with beef farms, I have had the opportunity to have many discussions with people on the subject of controlled breeding seasons. On a lot of beef farms, having a limited breeding/calving season is a dead fast rule. On other farms having a 60-90 day breeding season is a management option that is left on the table. Let's look at this debate in detail and see what makes the most sense for your operation.

### Year-round calving

For some this is simply a matter of "this is how we've always done it." For others it is the fact of not having an adequate pasture/lot to keep a bull in for 9-10 months out of the year. Some beef farmers do not want to cull any open cows, and a controlled breeding season will not give a non-breeder anyplace to hide. Finally, some farms will try to extend the usable life of an older herd bull for as long as they can. It is a lot easier to ask a bull to settle your cows over a period of a year versus a few weeks. I can understand why some farms don't want a controlled breeding season. After all, it is not the goal of every farm to maximum the profit potential from their beef cows.

To me though, the argument of "it's too much trouble" to run a breeding season is the one I do not see the logic with. I would argue that it is less trouble to have a dedicated and relatively short period of time to deal with calves being born. Anytime I am told that you can adequately watch out for calving difficulties 365 days out of the year, I pretty much believe that the fact is they watch for calving issues zero days out of the year.

### Controlled Breeding Season

There are four real areas that a controlled breeding season is a major advantage.

1. **Adequately watching for cows in distress at calving.** As mentioned above, it is difficult for most farmers to check on your cows 2-3 times a day for two months. Year-round it becomes almost impossible. With a single calf easily bringing over a \$1000 at market, every calf lost is a major hit.
2. **Being able to effectively market your calves at one time.** While some farms prefer to have a handful of calves to sell throughout the year to help with cash flow, a majority of farms simply look at the bottom line at the end of the year. Having all of your calves at a marketable weight at the same time allows you to look at feeding programs, preconditioning & heifer retention more accurately and with less overall labor involved.
3. **Being able to more accurately feed your cows**

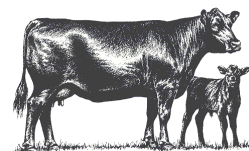
**according to their production cycle.** We do not live in an area with lush, year-round grazing for our cattle. Most of us feed hay for 3-5 months at a minimum. Sometimes we have to feed our cattle better (bite the bullet and spend some money on protein and/or energy resources) and other times we can get by on feeding them much more cheaply. If all of your cows are milking/dry at the same time, you can more effectively decide when it makes sense to spend money on feed.

4. **Being able to accurately track your cows breeding efficiency and cull non-performing cattle.** A cow has two jobs, breed every year and raise a good calf. Controlled breeding seasons makes it way easier to track these two critical components of a cow's performance. A cow has to re-breed in a timely fashion if she is ever going to make you money. Running a controlled breeding season will tell you in a hurry if your cows are doing this. If a cow checks open after the breeding season you will have a decision to make. Even if you decide to carry an open cow over till next year, you will at least be able to identify any non-breeders and track them from year to year to see if it is a re-occurring issue in many of your cows.

It is also easier to see if a cow is adequately raising a calf if there is something to compare it to. A cow that raises a calf that is 100 pounds less than the 10 other calves in the pasture at the same age is not doing her job. If she is in a year-round system and there are no other calves the same age to compare to, it is more difficult to evaluate this.

Each cattle operation is different. Some farms will calve year-round for good reasons. You have nowhere to put a bull up, you can get by with one bull in a year-round system versus 2-3 that would be required for a short breeding season, etc...

But if you calve year-round for no reason other than that's what you've always done, take some time and evaluate what it would take to switch. There are several systems that can convert from a year-round to a controlled season over a three-year period. These systems are designed to minimize culling and to help a farm become accustomed to a controlled system. If you want to know more about this system you can find it at : <https://edis.ifas.ufl.edu/an267>





## New Year, New Pastures

By: Liz Lahti, Livestock Extension Agent Cumberland and Hoke Counties

Horses are generally our pets and we love them so much and want to provide the best we can for them. But if you're allowing your horses to over graze their pasture, you are doing your beloved animals a disservice. Providing fresh pasture for your horses during the growing season (April/May through September/October) can help keep hay and feed costs down along with making your horses happy. This time of year is the best time to plan how you will provide better pastures, with green grass, for your horses during the growing season.

The first mistake many horse owners make is allowing the horses 24/7 access to their entire grazing area, leaving the plants with little to no rest time. This method is called continuous grazing. Allowing continuous grazing is usually due to overstocking. The recommended acreage for one horse, if allowing continuous grazing, is two acres and possibly more, depending on pasture productivity. Providing less will require supplemental feeding and providing more will most likely result in the need to cut for hay.

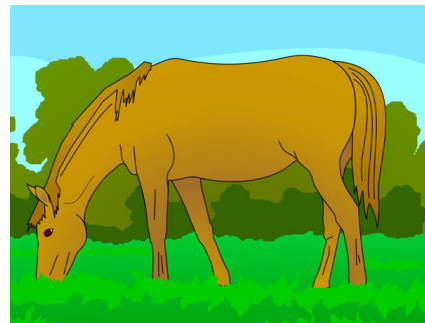
One way to relieve the land of stress from continuous grazing is to incorporate rotational grazing. Rotational grazing is rotating animals between two or more grazing areas, allowing the areas not being grazed to rest so the plants can regrow. Putting up fencing, ensuring water access from all paddocks, and having time to move the horses are all important in rotational grazing. This may sound like a daunting task, but once there is a plan in place, it's easy to follow and make modifications as needed. Temporary fencing can be used to easily change paddock sizes and locations. Allowing more area per paddock will give the horses more to graze and will reduce the frequency of movement. One thing to keep in mind, however, is the smaller the area the more uniformly grazed the grass will be which discourages weeds and encourages desired grass growth. You will have to monitor the pasture when the horses are grazing. Do not allow them to graze to the dirt; you want to leave about one to two inches of grass growth. Once the grass gets to this level take them off of it whether the next pasture is ready or not. You can create a common area, or dry lot, to keep the horses off of the grazing area temporarily and to feed hay and allow access to water.

The first place to start when trying to improve pas-

tures is doing a soil test. Soil tests can tell a lot about what's going in a pasture because it gives an accurate account of what nutrients are needed for optimum plant production and how much of those should be applied. Soil testing is available through the North Carolina Department of Agriculture and Consumer Services (NCDA &CS). The test is free from April to November. Samples submitted from December to March will be subject to a \$4.00 peak season fee. The lab will provide you with a report of what needs to be added to your soil. When taking a soil test, take several core samples four to six inches deep and mix them together in a plastic bucket to get a representative sample. If you have areas of your pastures that are noticeably different, be sure to sample those areas separately. Getting your soil fertility correct is a great way to encourage forage to grow and discourage weeds.

The following is an example of how to incorporate rotational grazing into your operation without getting too crazy, even if you are overstocked. Start by sectioning off a piece of the grazing area now, keeping the horses off. Take soil samples in February to see what the fertility level is and fertilize in March/April according to the soil report. Keep the horses off of the area until it is six to eight inches tall. During this time, take care of any weed problems. Once the grass is tall enough, allow the horses to graze until the grass is one to two inches tall and remove the horses until the grass is back to six to eight inches. When the horses are not on the green pasture, allow them access to hay. With the low hay supply in the area and high hay prices, even taking the horses off hay for one day a week will save you money.

Rotational grazing is an easy way to give your cherished horses the green grass they desire. If you have any further questions on rotational grazing, contact your local Extension agent.



## Coccidiosis in Goats and Sheep

By: Kelly McCaskill, Livestock Extension Agent Moore County

There are numerous diseases that sheep and goat producers should be aware of but coccidiosis is one of the most common and also most detrimental to small ruminant production. Coccidiosis is a parasitic infection caused by the protozoan organism coccidia. Not all species of coccidia are disease-causing. Some are also species specific, meaning that a cocci that will make a goat sick will not affect sheep or cattle and vice versa.

The appearance of clinical signs of coccidiosis depends on the number and species of coccidia in the host, the conditions of the host, such as age, stage of production, health condition and breed, and environmental conditions such as climate or stress. Animals do eventually develop immunity to coccidia, but it takes time, so young animals are more susceptible to infection and disease. Adults may have coccidia as part of their residential gut microbes, showing no sign of illness or disease, but act as source of infection for their offspring.

The life cycle of coccidia is complex causing damage to intestinal cells at multiple stages. The cycle begins with the oocysts being passed in the feces of an infected animal and ingested. Once inside, the parasite invades cells, reproduces, and invades more cells. A single oocyst can be multiplied many times and cause a great deal of damage to intestinal cells before coccidia is detected in the animal's feces. In fact, animals may die before showing any signs of coccidiosis if a high number of oocysts are ingested at once in a young or stressed animal. With a more gradual exposure, the animal will develop resistance that will slow the rate of coccidial reproduction in their intestinal tract. This resistance usually does not develop before 5 or 6 months of age. After resistance is built, the animal will still develop infections and shed coccidia in its feces, contaminating the environment, but will generally show no signs of illness.

Young animals (3 weeks to 5 months old), having crowded, wet and unsanitary conditions, and stress all contribute to clinical coccidiosis. To keep coccidiosis to a minimum on your farm, make every effort to reduce stress on your animals and improve sanitation practices. Keeping clean, dry bedding where mothers and babies will be laying helps to reduce the risk of coccidiosis in the young animals. Regularly cleaning and disinfecting water and food troughs will lessen ex-

posure to coccidia. Also keeping stress on animals as low as possible will help keep immune systems running at top notch, allowing the animal to fight off and build resistance to a coccidia infection. There are several types of stress that can decrease immune function in an animal including, but not limited to, weather changes or extremes, transportation, weaning, nutritional changes or deficiencies, lactation and unsanitary environment. Any combination of these factors can contribute to coccidiosis in sheep and goats.

The first sign of coccidia that most people notice is runny diarrhea, often coating the hindquarters and tail. The animals may also show decreased appetite, listlessness, weakness and abdominal pain (displayed by crying or frequent repeated standing and lying). If the infection is not too severe the animal may be sick for a couple of weeks and then get better. However, if the animal has suddenly been exposed to a large dose of coccidia and have no immunity built up, they may quickly dehydrate and die. Although mortalities definitely have an impact on the profitability of a small ruminant production, the damage caused by a non-fatal infection can be even more costly. When an animal is infected and the parasite invades the intestinal cells, lesions are formed, causing long-lasting effects including general unthriftiness, poor growth rate, poor milk production and susceptibility to other disease and health issues.

As with any disease, an ounce of prevention is worth a pound of cure. If you find yourself with what looks like coccidiosis on your farm, you should always consult your veterinarian to confirm the cause of illness as well as devise a treatment plan. A coccidiosis treatment program may include the feeding of ionophores, treatment with sulfa drugs or amprolium, or the use of alternative treatments. It is important to use all medications as directed. Be sure to follow dosage instructions and withdrawal times. Rotational grazing and culling infection prone animals can also help improve herd health and minimize coccidiosis on your farm.

Coccidiosis is almost inevitable in a sheep or goat production but working on prevention and knowing what to look for in order to catch it early will hopefully keep your coccidia related losses to a minimum.

## 4-H Livestock Skill-a-Thon

By: Eve Honeycutt, Livestock Extension Agent Lenoir and Greene Counties

There are many opportunities for kids who are interested in livestock to further their skills and knowledge. Livestock Judging is probably one of the oldest and most well known contests. Being able to select quality animals and formally defend your reasons is an incredible skill for young people. However, I believe one of the lesser-known programs can influence more children in a positive way. Individually and as a team, 4-H Livestock Skill-a-Thon is a great way to get kids involved in livestock and gain new knowledge - no animals required.

### Identification

The biggest part of a skill-a-thon contest is identification. For many kids, identification is just memorization of breeds, feeds, tools, and meats. We study the four major species - sheep, goats, cattle, and pigs, so any thing falling into those categories can be laid out for identification. Pictures are used for the breeds, but actual feeds, tools, and meat are available for the other stations. Meat is usually the most challenging for kids to remember, and the older kids also have to learn how the meat is best cooked. A great way to study for meat ID is to take part in shopping and cooking at home.



### Written test

The written test is just that - a multiple choice test that can cover a wide range of topics about the four species. Everything from nutrition, reproduction, anatomy, diseases, marketing, and more. Kids work at their own pace and on their own to determine the best possible answer.



### Group Problem

If a team is entered - three or four kids in the same age division - the team works on a group problem. They are given about 20 minutes to work together on the problem- which could be anything from reading a feed label to understanding EPD's on a bull.

Because the skill-a-thon contest is a combination of team work and individual work, it allows almost all children to be recognized in the area of the contest in which they excel. Most kids enjoy skill-a-thon because they do not have to speak in front of anyone and they can easily study on their own. Skill-a-thon is an easy fit for a child who is already showing because it will build their knowledge and allow them to better answer questions from a judge. Kids who do not do well in the show ring can often excel in skill-a-thon, where a completely different set of skills is needed.

The State 4-H Skill-a-Thon contest is July 28-30, 2016 in Raleigh. Most Extension Agents have teams that study year round. Consider giving your kids a chance to expand their livestock knowledge with this great contest.



## Don't Ignore Hybrid Vigor

By: Paul Gonzalez, Livestock Extension Agent Sampson County

Many producers have gotten away from planned crossbreeding systems. I see this on many farms I visit, not just in Sampson County. It is due partly to the ready availability and ease with which an Angus bull can be purchased and partly to the ease of management when using only one sire breed; but is mainly due to the market demand for black cattle. I know some people will not like what I have to say and I will come across looking like I am Angus-bashing! While that is not my intent and I am not anti-Angus, it will be the main focus of this article due to the fact that Angus is at the center of this dilemma. Keep in mind; however, that what is said here applies to any breed of cattle, not just Angus.

I'll start by saying that more and more producers are, whether knowingly or unknowingly, moving toward cow herds that are basically purebred Angus. Year after year, Angus bulls are turned in with the cows; and heifers from those bulls are kept for replacements. If replacements aren't retained, Angus sired heifers or cows are usually purchased to enter the herd. These females are then bred to an Angus bull and the pattern is repeated. Assuming I started with a different breed initially, after using Angus bulls and keeping heifers for four years, I have some heifers now that are 93.75% Angus. This percentage is considered to be purebred by breed associations that allow breeding up. As you can see, in a few more years as you cull older cows and replace them with heifers, you have a herd that is considered purebred Angus. Again, keep in mind the same will be true if you use any breed in the manner described above.

I stated in the opening paragraph that the main reason for this is the market demand for black cattle. The easiest way to assure yourself of getting black cattle is to use an Angus bull. There is very little chance that a black Angus bull carries the red gene anymore so you don't have that concern like you would using a black bull of another breed. However, I would also like to point out that there are more homozygous black bulls available in other breeds these days. Another reason is the ease of management. You only have to have one breeding pasture. You don't need more than one bull. And you don't have to keep up with parentage on heifers or how long you have been using a bull if you never switch breeds. A simple rotation of bull breeds every four years will make a big difference in your herd while still keeping management fairly simple.

Now to the point of the article. By the continued use of the same sire breed, you are losing the effects of heterosis and giving up what are essentially free pounds. Heterosis, or hybrid vigor, is the improvement shown by crossbred animals over straight bred animals. How much improvement varies depending on the breeds used, but for weaning weight will average about 4% for crossbred calves over straight bred calves that are both nursing straight bred cows. This means you would get another 20 pounds on each 500 lb calf just for switching bulls. If you have twenty-five cows, it is like selling another calf. Not only do the calves weigh more but you also get added survivability in the crossbred calves so you get an-

other 3% heterosis advantage in weaning percent. Let's look at an example.

Say breed A calves average 480 lbs at weaning and breed B calves average 520 lbs. Calves sired by breed A out of breed B cows have weaning weights of 540 lbs and calves by breed B sires out of breed A cows average 520 lbs. The amount of heterosis from the crossbreeding would be figured by subtracting the straight bred average  $(480+520)/2=500$  from the crossbred average  $(540+520)/2=530$  and dividing the difference, 30 in this example, by the straight bred average and multiplying by 100  $[(30/500)*100=6]$  which yields a 6% heterosis value.

The advantages become even greater if you use a third breed on crossbred cows. You get the added pounds from the calf heterosis in the example above. You also get greater weaning percentage from the crossbred cows, due to higher conception rates, and even greater weaning weights due to increased milk production. In a study conducted at the Fort Robinson Research Station (Cundiff and Gregory, 1977; Gregory and Cundiff, 1980), crossbred cows raising crossbred calves weaned 23.3 percent more calf weight per cow exposed than straightbred cows raising straightbred calves. Two thirds of the advantage was attributed to the maternal heterosis of the cow and one third to the individual heterosis of the calf. Other studies have shown increases of up to 28%. Experiments using Brahman/European crosses have demonstrated even greater total increases over the straightbred parents.

It has been proven through research that hybrid vigor will add pounds to your calf crop. In high market price times such as we are in now it may not seem as significant but when prices are low it is extremely important. This additional weight should not be dismissed to simply chase black hides. Again, let me emphasize that I am not in any way bashing, degrading, or opposing the use of Angus cattle. Angus cattle have made great contributions to the beef industry and absolutely have their place in a well planned and implemented crossbreeding system. It seems that some producers see them as a silver bullet and have fallen into a straight breeding rut. As I stated earlier, more homozygous black cattle are becoming available in all breeds. There are breeders developing black Herefords with a few bulls already on the market. And, I have even seen one registered black Charolais! So you can still meet the demand for black calves using a second breed of bull. As for ease of management, switching bull breeds every four years really isn't that much trouble. Most folks buy a new bull every few years anyway. Pick two breeds and buy whichever one you don't currently have. Having more than one breeding pasture can make things a bit more difficult but opens up other options as well. One thing I should mention here is to choose breeds which are similar and complement each other. I won't make breed recommendations here but if you would like to discuss, or debate, breed choices and breeding systems, feel free to give me a call.



## Cost Share Program: Litter Spreader

By Katie Stevens, Wayne County Soil & Water

**What is a litter Spreader?** A Litter Spreader is a Waste Application System that is an environmentally safe system used for the conveyance and distribution of animal wastes from waste treatment and storage structures to agricultural fields as part of a waste utilization plan.

**Why is it useful?** It increases soil carbon and reduces atmospheric carbon levels while also reducing soil erosion and runoff. Litter spreaders will reduce nitrate leaching and reduce energy demands for natural gas-intensive nitrogen( N) fertilizers.

**How can Soil & Water help?** If you are interested in incorporating a litter spreader 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. Cost shared litter spreaders must be maintained on your farm for a minimum of 10 years and are subject to yearly spot checks . Wayne Soil and Water will Cost Share 75% of the litter spreader with a cap of \$7,500.00. For a complete list of guidelines please contact our office staff. Our cost share program has numerous animal waste management and animal waste application practices available for a variety of animal operations. Please contact our office

(919) 734-5281 Ext 3 or stop by so we can assist you. Our office is 208 W. Chestnut Street, Room 104. Goldsboro NC 27530



## Forage Management Tips

### January

- If winter pasture is limited, feed hay in the pasture or allow cows to graze every other day. The priority for limiting pasture is (1) calves by creep grazing, (2) stockers, (3) nursing cows, and (4) dry cows.
- Keep animals off newly planted winter annuals during wet periods to prevent damage. Allow calves first priority to graze.
- Sample hay bales which are stored outside that will be fed during the next four to eight weeks.
- Decide which fields will be re-seeded or overseeded during late winter and early spring; obtain soil test and supplies for planting.
- Lime may be applied during this off season.
- Keep a record of winter weed problems so that control measures can be taken next fall. This is the latest month that some herbicides may be used on legumes.
- Determine animal feed requirements for the year (about 6 tons of hay equivalent/cow-calf pair) and outline a 12 month forage production and use plan to meet the needs.

### February

- Apply nitrogen to cool-season grasses to stimulate early spring growth.
- Overseed legumes, such as ladino clover, into well-grazed (2 inches or less) grass pastures.
- Lime fields for spring plantings.
- Divide pastures to improve the quality and persistence of pasture plants.
- Locate sources of hybrid bermudagrass sprigs for planting.
- Burn warm-season grass residues in late February.
- Get herbicide sprayers ready to control weeds in dormant bermudagrass fields.

