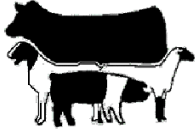


Johnston County Center

Livestock News

Nov/Dec 2024



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Save The Dates- Winter Association Meetings

The Johnston County Goat Producers annual meeting January 21 at 6:30 pm in the Auditorium of the Johnston County Agriculture Center. A dinner will be served. Please look for more details in the January Livestock News.

The Johnston County Cattlemen's Association annual Membership February 11, 6:30 pm with dinner Johnston County Livestock Arena Check out the new hats at the Johnston County Cattlemen's Association Facebook page! Available at the Extension Office

Flu Vaccines Available

The Johnston County Health Department wishes to extend for anyone working with livestock to receive a flu vaccine this season. If you are interested, please contact the Health Department at the number on the fliers below. Services are available in English and Spanish.

FARM WORKERS FLU VACCINE

VACUNA CONTRA LA GRIPE PARA AGRICULTORES



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DO YOU WORK ON A FARM WITH DAIRY COWS OR CALVES, POULTRY OR SOME OTHER ANIMAL ON A FARM?

CALL US TODAY TO SEE IF YOU ARE ELIGIBLE FOR A FREE FLU VACCINE!

(919) 989- 5504

¿TRABAJAS EN UNA GRANJA CON VACAS LECHERAS O TERNEROS, AVES DE CORRAL O ALGÚN OTRO ANIMAL EN UNA GRANJA?

¡LLÁMENOS HOY PARA VER SI ERES ELEGIBLE PARA UNA VACUNA GRATUITA CONTRA LA GRIPE!

(919) 989- 5504

For any meeting listed, persons with disabilities 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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Animal Waste Management Updates

By: Becky Spearman, Livestock Extension Agent with N.C. Cooperative Extension in Bladen County

Initial 10- hour Animal Waste Operator Class (OIC)

There will be an initial class on January 30 and 31 in Bladen County. Participants will be able to take the March exam. To sign up, call (910) 862-4591 or email becky_spearman@ncsu.edu.

In-person County Animal Waste Continuing Education Classes - 6 hours

Date	Location	Time	To register, call or email:
November 22	Duplin County	9 am - 4:30 pm	910-296-2143 or wanda_hargrove@ncsu.edu
December 3	Duplin County	9 am - 4:30 pm	910-296-2143 or wanda_hargrove@ncsu.edu
December 4	Wayne County	9 am - 4 pm	919-731-1525
December 5	Greene County	9 am - 4 pm	252-560-6094 or kfmohrfe@ncsu.edu
December 5	Cumberland Co	9 am - 4 pm	910-321-6405 or liz_joseph@ncsu.edu
December 6	Sampson County	9 am - 4 pm	910-592-7161 or max_knowles@ncsu.edu
December 9	Moore County	9 am - 4 pm	910-947-3188 or liz_joseph@ncsu.edu
December 10	Bladen County	9 am - 4 pm	910-862-4591 or becky_spearman@ncsu.edu
December 11	Hoke County	9 am - 4 pm	910-875-3461 or liz_joseph@ncsu.edu
December 12	Lenoir County	9 am - 4 pm	252-560-6094 or kfmohrfe@ncsu.edu

Blanket Extension for Bermuda pumping window

NCDA & CS issued a blanket extension for swine effluent application on bermudagrass hayfields to October 15, 2024. There is a letter that needs to be kept with your pumping records. Contact your Extension Agent to get a copy.

New General Permits

In July 2024, the General Assembly passed Session Law 2024-32 which extended the expiration of the General Permits and the Certificates of Coverage until September 30, 2026 for permitted animal feeding operations. A letter is posted on the DWR general permit renewal webpage: deq.nc.gov/animalpermits2024

Reminders

- Lagoon analysis is required 60 days before or after applying animal waste. Set reminders on your phone or calendar to take them in a timely manner.
- Sludge surveys are due yearly by 12/31 unless you received an extension.
- Check if your calibration (due every other year for general permits) and soil samples (due every 3 years) are due this year by 12/31.

Check your hours and due date.

License fees are \$25 per year and due by Dec 31. Make sure to pay early, so you are not charged a late fee of \$50.



Twins in Beef Cattle—Twice as many calves, four times the trouble?

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

I hate twins! (at least in cows) Now I realize this is not the most popular opinion to admit to, but most people in this world aren't making their living managing mama cows who are raising calves. Cattle giving birth to twins (also called twinning) is a natural occurrence in around 2% of births in predominant beef breeds. In dairy cattle it is a slightly higher rate of 3%-5% of all births and is not as discouraged due to the dairy production system of hand raising calves. After all, if you're going to bottle raise the calves anyway, what's the problem? But for beef farms, twins generally do nothing but cause confusion and mayhem in the calving pasture.

Twinning occurs in two different ways. Fraternal twins are the most common and occur when the cow ovulates two eggs at once and both get fertilized and carried to term. These calves are normal genetic siblings despite being born at the same time. They can be both bulls, both heifers or you can get one of each. Identical twins are much rarer and occur when a fertilized egg splits into two embryos and each grows to term. These will be twin bulls or twin heifers and will have the exact same DNA and physical characteristics.

Regardless of how twins come to be in this world, they are pretty rare in the cattle business. When it comes to twins, there are two schools of thought in the cattle industry. Most cattle farmers, such as myself, think they are nothing but trouble and actively hope each calving season to not see any!

There are a few cattle farmers, however, that have a more positive opinion of twinning and don't mind the extra work that twins bring due to the increased profit potential that comes with a multiple birth. After all, when it comes to selling feeder calves, more is better. Let's look at the pros and cons of twins...

Pros

1. You will have more weight on the truck come sale day...That's pretty much it. BUT, let's be honest, when it comes time to make a profit, that's a pretty big advantage. Numerous studies conducted over the years have shown that a beef cow raising twins will give you 70% more pounds of calf at weaning. This past year when feeder cattle were bringing over \$2.00/lb that's a figure that will put a smile on your face.

If only it were that simple

Cons

The list of cons is a whole lot longer than the list of pros.

1. Calving problems - Despite much lower calf birth weights in twins versus singletons, calving problems (dystocia) are significantly higher in twins. Breech births, tangled limbs, heads turned, etc... are all more commonly seen when you have two calves trying to get out

into the world at the same time.

2. Still borns - Due to the increased occurrence of dystocia, you then have more still borns with twins than single births. Some studies have rated still borns in twins as high as 25%.

3. Newborn calf rejections - By far the biggest problem associated with twins is the cow not accepting or raising both calves. The most normal scenario is for a cow to give birth the first calf, start to clean the calf off and maybe let the calf nurse and then start her 2nd labor with calf number two and wander away from the first calf and never look back. I have seen this scenario happen time and again. IF you're fortunate enough to observe both births and can get the cow and both calves in a small isolation pen as soon as they are both born sometimes you can get the cow to accept both calves. Not allowing her to walk off and leave one of the calves for several days until each one is strong enough to follow the mother works occasionally. Everybody has heard the stories of somebody saying that they had a cow give birth to twins and accepted them both no problems out in the pasture. There is no doubt in my mind that this happens every great once in a while, but from my personal experience this is not what usually happens.

4. Increased nutrition - With two calves nursing, it's not surprising that a cow is going to need to eat more. Cows raising twins will have a much harder time maintaining their body condition without increased levels of nutrition.

5. Longer breed-back intervals - Due to higher instances of dystocia and increased milk production, cows with twins breed back slower than cows with single calves.

6. Freemartin Heifers - Finally, heifers born twin to a bull will suffer from freemartinism. This is a genetic disorder that twin heifers get from sharing a blood supply with their bull sibling in the uterus. The hormones from the bull will interrupt her female reproductive system from developing normally resulting in her being a freemartin heifer - whom are sterile about 90% of the time! It will not affect the heifer calf otherwise, and they make perfectly fine feeder calves but they should never be kept or marketed as breeding stock.

At the end of the day there is not a lot that can be done to prevent twinning in your cows. Twinning is mildly hereditary, meaning if your bulls or cows have twins in their pedigree then they will have a greater than average chance of having twins someday down the road. Like a lot of things Mother Nature throws at us, twin calves are pretty much just something we have to deal with if we're going to raise cattle.

Prussic Acid Poisoning

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

With the approach of cool weather comes the threat of frost. After the first frost of the year, we get questions concerning grazing and the potential for prussic acid poisoning in livestock. Since it seems to be a common topic every year, I'll go ahead and address it now!

The main grasses in question are the sorghums, sorghum-sudangrass crosses and sudangrass. The greatest danger seems to be after a drought or a series of frost; the grasses with the highest potential for problems are the forage sorghum varieties and less so with the sudangrasses. The type of grass is not the only critical factor; the fertility of your soil may also affect the chances of prussic acid poisoning. Those soils that are high in available nitrogen and low in phosphorous tend to be the most problematic.

A few weeks rest between freezing and grazing reduces the risk of poisoning because the cyanide release levels have time to decrease. When plants grow and become mature, the risk is also reduced since the higher levels are seen in the leaves of the plant, rather than the stalk and stem; times of stress (drought or frost) increase the potential of toxicity in plants, even mature ones. On high risk forage, toxicity will take its toll before you even have a chance to figure out your animals are sick.

Keep an eye on your animals if you suspect the possibility of prussic acid poisoning. Obtain a forage sample for testing if possible. The active compound in these grasses, and the cause for toxicity, is HCN (hydrocyanic acid, i.e. cyanide poisoning). Symptoms of prussic acid poisoning include gasping, staggering, trembling muscles, and possible death from respiratory failure.

Once a frost occurs, and you're concerned about your animals, take them off the pasture and prevent grazing of the sorghum, sorghum-sudangrass, or sudangrass. Sufficient drying and recovery should occur within 5-8 days following the frost, after that it is probably safe to return your animals to that field. Here are some other tips for handling and/or preventing possible prussic acid poisoning in livestock:

- Do not graze sheep on sudangrass or hybrids until it is 12-15 inches tall
- Do not graze cattle on sudangrass or hybrids until it is 18-24 inches tall
- Sorghum may not be safe to graze until fully headed
- Have the plants tested for toxicity levels before grazing
- Do not graze hungry livestock on sorghum or sorghum-sudangrass hybrids. Potential for poisoning increased with the amount of this high risk forage that is consumed.
- Follow proper fertilizer recommendations to ensure proper nitrogen and phosphorous levels
- Select grass varieties that are low in prussic acid

There are other plants that may contribute to the possibility of prussic acid (cyanide) poisoning, these include, but are not limited to: arrowgrass, black cherry trees (leaves and twigs), johnsongrass, peaches, plums, etc. Call your local vet if you suspect your animals have prussic acid poisoning and remove them from the pasture. Don't delay—time is of the essence with any poisoning!

NC SMALL RUMINANT IMPROVEMENT PROGRAM WINTER WEBINAR SERIES

7:00-9:00 pm via ZOOM

Nov 7th

Goats 101- Covers basic nutrition, health, and management
Register: <https://go.ncsu.edu/goats101>



Dec 5th

Hoof Health- Prevention and treatment of common hoof issues
Register: <https://go.ncsu.edu/hoof-health>



Jan 9th

Opportunities with Sheep and Solar Farms
Register: <https://go.ncsu.edu/sheep-solar-grazing>



Feb 6th

Livestock Guardian Animals- Considerations and Challenges
Register: <https://go.ncsu.edu/livestock-guardian-animals>



Mar 6th

Pasture Management for Small Ruminants
Register: <https://go.ncsu.edu/pasture-management>

Accommodation requests related to a disability should be made by a week prior to the webinar date to Adam Lawing, (336) 318-6000 or adam_lawing@ncsu.edu

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Thermoregulation of Your Equine Friends & Cold Weather Considerations

By: Emi Briggs, Livestock Extension Agent with N.C. Cooperative Extension in Montgomery County

In the winter, just like in the summer, weather conditions can pose a threat to the health of your equines. Below is a diagram from [American Association of Equine Practitioners](#) on thermoregulation in equines during cold weather.

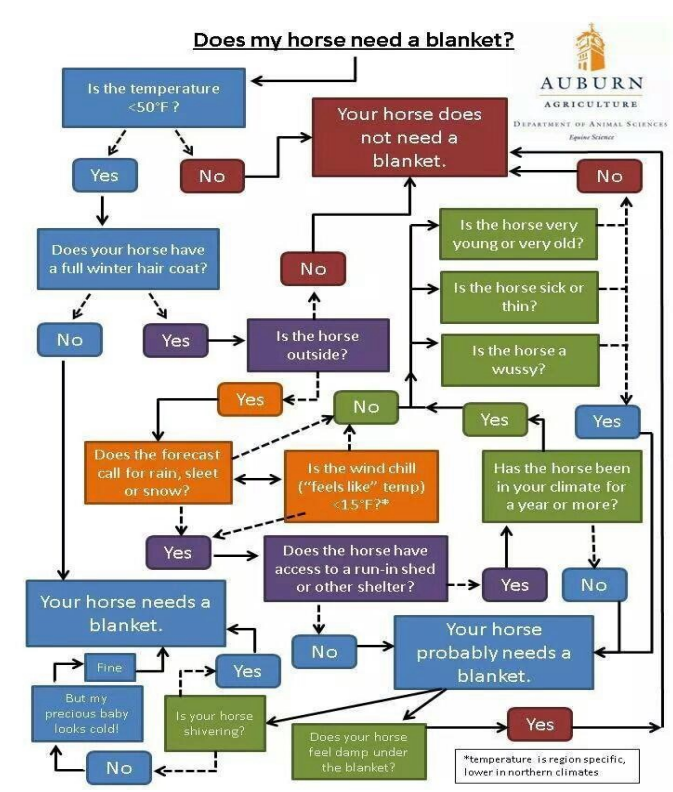
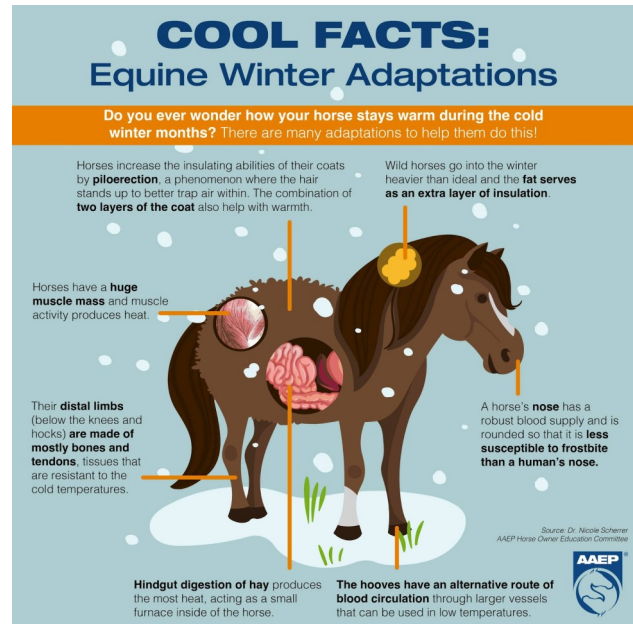
As displayed, your equine friends have several anatomical structures that support production of warmth including: large blood vessels, hindgut fermentation, piloerection of hair, and large muscle mass. Each item, as expressed in the diagram below, plays an important role in thermoregulation. All of these adaptations work together to achieve a common goal of thermoregulations.

Even with all these natural adaptations, your equine can still need assistance in extreme temperatures. Some considerations to take into account during winter are adequate shelter for a windbreak and to get out of the rain/snow/ice, adequate forage availability, adequate space to move for production of warmth, and the largest issue: adequate hydration.

In colder weather conditions, one study showed that water consumption can be decreased if water temperature is also reduced ([Kristula et al. 1994](#)). A more common issue equines face in the colder months are stray electrical currents from heated water troughs. Checking your heating elements in your water troughs can be vital to adequate water consumption in the winter to make sure your equine can thermoregulate appropriately. Horses need to consume at least one percent of their body weight in forage per day and should be increased by close to 1 percent during the colder months.

There are many steps to ensuring your equine thermoregulation is optimal. Some considerations to take are regularly checking your water tanks if using a tank heater, ensuring your blankets are free of rips, tears and or stretched leg and belly straps, and removing wet and soiled hay to prevent a horse getting wet due to their bedding. Some tips to keep your water tank heater working well are: make sure the tank stays clean and free of debris, check water daily for voltage issues (current in water, frayed cords, overheating, etc.), and make sure your tank is rated for your style of heater. If you look at flowchart below, you can use it as a guide for if you think your horses thermoregulation is adequate for your conditions or if they need support with a blanket. Horses do a pretty great job of keeping themselves warm as discussed previously but young, elderly, and sick can create a need to support the equine with a blanket. Research shows no evidence that a blanket affects a horse's

ability to have its hair stand up trapping heat. If your horse is wet (not covered in snow, snow insulated), young, skinny, or older, monitor your horse regularly to make sure they are not shivering, showing decreased movement, becoming lethargic or have pale gums.



Protecting Your Backyard Flock from Disease with Biosecurity

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

One of the tips I give my poultry producers most often is to “just watch your birds.” You can learn so much about your flock, their health, and their behaviors simply by watching them for a few minutes every day. You can quickly notice if there is a sick bird, or if you may have a bigger problem in your flock such as disease. Oftentimes, it can be expensive to find out what’s running through your flock if you have a problem, so it’s a great idea to learn some clinical signs of disease while “watching your birds” to recognize and diagnose problems in your flock.

Chickens can show different types of symptoms when they are sick. They can exhibit disease systems that correlate with their body such as: swelling or discolored combs and wattles, cloudy and draining eyes, discharge from the nasal passages, drooping wings, discolored feet and legs, or scales and physical injuries to the feet and legs.

Other symptoms can be found in the bird’s behavior. Do they have a slow or difficult walk or gate? Are they eating normally as well as drinking plenty of water? You can also watch their activity level. You want chickens to “do chicken things.” Do you notice any coughing or sneezing in your flock? Are they having difficulty breathing, or are they panting or gasping for air? Do you notice a color, frequency, or consistency change in their feces, as well as the presence of blood or mucus?

If you suspect you have disease in your flock, have multiple birds die, or are unsure of the cause of a bird’s death, the best way to confirm what is going on is to immediately send the deceased bird to the Rollins Animal Disease Diagnostic Laboratory that is a part of the North Carolina Department of Agriculture in Raleigh, NC. Their website is <http://www.ncagr.gov/vet/ncvdl/> and their phone number is 919.733.3986.

Prevention is the biggest way to help keep disease out of your flock. Biosecurity means to limit your disease challenges by properly managing your farm and flock. Here are some tips on how to put a good biosecurity plan in place at your farm: good husbandry – clean water, feed, shelter, and daily management. Sanitation – cleaning and disinfecting equipment and housing. Nutrition – feeds must meet bird’s need for energy, protein, vitamins and minerals, and will change as they grow. Size and palatability are important and clean water must be available at all times. Drinkers must provide enough space and capacity for all your birds. Shelter – should provide protection from the sun, wind, and rain as well as proper spacing. Shelters should be safe from predators as

well as meet temperature requirements and be able to handle the manure load. Sanitation – cleaning debris and dust from surfaces, proper selection of equipment and materials, disinfection of equipment and pens, and proper manure treatment are key to keeping disease out of your flock.

The goal of biosecurity is to stop the spread of disease, including bringing problems in or sending problems out to your neighbors. Diseases are spread through contact or close proximity to a host or vector. A vector is any organism that transfers pathogens from one host to another. Typically, people are the most dangerous vectors due to mechanical transfer on our clothing, shoes, equipment, and vehicles. Always wash your hands after you work with your birds as well as shower and change clothes before visiting other poultry producers and before returning to your own flock. Using boot covers and a dedicated set of clothing and shoes can also cut down your disease risk. Avoid mixing species and ages of birds and buy from only trusted and clean sources. Quarantine all new birds for at least two weeks before you mix them with the rest of your flock. Limit visitors to your farm and disinfect all equipment when moving from one farm to another. Work youngest birds to oldest and always work sick birds last. Wash and sanitize equipment after you use it. Remove and dispose of mortality properly and promptly – within 24 hours by law. Isolate birds you believe to be sick. Rodent control is also very important. They are vectors for many diseases and destroy your equipment and feed. Control insects including parasites and prevent contact with wild birds.

If you have any questions about how to put biosecurity practices into place on your farm, you can contact your local Cooperative Extension Office and speak with the livestock agent or myself at Margaret.Ross@ncsu.edu.



East Carolina Showmanship Circuit Winners

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

The 2024 Eastern Carolina Showmanship Circuit wrapped up in October and awards for each species were presented at the NC State Fair. Livestock Shows in the Eastern Carolina Showmanship Circuit were held in Halifax, Smithfield, Kinston, Elizabeth City, Tarboro, Kenansville, Trenton, Wilson, Greenville, Goldsboro and Clinton.

Participants in the circuit were required to attend at least four shows to be in contention for circuit awards, with their top six scores being counted towards their circuit total. The highest point winner in each age division received a championship belt buckle, with reserve winning an embroidered jacket. Third through fifth place exhibitors each received gift certificates from livestock supply vendors.

Sponsors for the 2024 circuit included:

Signature Circuit Sponsors; Smithfield Foods-Hog Production Division

Platinum Sponsors-AgCarolina Farm Credit, NC Pork Council

Silver Sponsors- NC Hereford Association, Picole Farm

Swine Showmanship Winners

Placing	Novice	Junior	Intermediate	Senior
1	Harley Barwick	Eli Price	Mackenzie Cox	Annah Sullivan
2	Clayton Rouse	Emma Pulcini	Connor Barwick	Travis Cox
3	Marker Smith	Genevieve Pulcini	Lucy Formisani	Calyn Taylor
4	Wesley Smith	John Elks	Halle Taylor	Jessa Hacker
5	Ella Grace Woodell	William Messer	Jenna Hacker	Isaac Elks

Goat Showmanship Winners

Placing	Novice	Junior	Intermediate	Senior
1	Adelyn Jane Hemilright	Anderson Lee	Kennedy Lee	Mary Grace Baker
2	Madison Nolette	Kennedy Winslow	Emma Taylor	Grace Schratwieser
3	Sawyer Hemilright	Brooke Bright	Cody Formisani	Caleb Davis
4	Addie Gail Waters	Easton Brooks	Blake Bright	Lane Markham
5	Reade Jackson	Blake Engledove	Karleigh Meads	Abby Gaskins

Heifer Showmanship Winners

Placing	Novice	Junior	Intermediate	Senior
1	Makenzie Davis	Ruby Ann Pipkin	Makayla Davis	Lydia Crocker
2	Kylie Taylor	Andie Rae Byars	Grayson Blankenship	Abigail Blankenship
3	Wyatt Beasley	Massey Cassell	Jackson Pipkin	Caleb Davis
4	Olivia Cassell	Matilda Parker	Laithan Blankenship	
5	Mack Byars		Emma Beasley	

Lamb Showmanship Winners

Placing	Novice	Junior	Intermediate	Senior
1	Sawyer Hemilright	Ditty Moore	Kendall Ayscue	Darci Boucher
2	Cora Beth Casper	Josey Kemp	Ava James Kemp	Emma Britt
3	Karson Harris	Kaylee Casper	Maddison Wagaman	Jordan Wagaman
4	Nolan Cross	Brady Moore	Lorelie Coxe	Lane Markham
5	Nathaniel Poole	Kennedy Winslow	Payton Robers	Caitlyn Anderson