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RUCKER'S RAMBLINGS  
ANIMAL AGRICULTURE INFORMATION  
LIVESTOCK, HORSES & FORAGE  
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### A FEW THOUGHTS OFF THE TOP OF MY HEAD

- \* There are a few producers who have contacted me wanting to reduce their cattle herds. I know of some Angus, Simmental and SimAngus replacement cows for sale. Many are in their prime. Contact me if you are looking for some good replacements. Also, let me know if you have cattle for sale and I'll see if there might be someone looking for what you have.
- \* For information on upcoming programs, as well as what Extension has to offer, visit our website to learn more. There are many interesting programs going on with 4-H, Horticulture, Row Crops Family & Consumer Science and more. Visit <https://davie.ces.ncsu.edu> or <https://yadkin.ces.edu> to learn more about all the programs we offer.
- \* The calendar says its spring but the temperatures have been climbing some. A sure sign that summer is close by. Make plans to help your livestock, and yourself, through the upcoming season as stress free as possible.
- \* We all have heard that the price of feed commodities (corn, soybean meal and others) are rising. This is good for the crop farmers but causes livestock feed prices to go up as well as other items we use daily. There are shortages of feed alternatives and by-products which also raises the price. NOW is the time to make a plan on the most cost effective way to feed your livestock (cows, horses, sheep, goats, Llamas, etc.). Feed (grain) is a necessary part of livestock nutrition and must be used wisely. Make a plan to look at utilizing your pastures more efficiently, will help you supply nutrition to your hungry livestock. I have a more detailed article on this subject, later in this newsletter.

### BASICS OF LIVESTOCK GRAZING

Whether you are new to the world of livestock or have been grazing animals for years, it seems there are always questions to ask and ways to do things better. If you have livestock or plan to start a small operation soon, make plans to attend a webinar that will address some of those questions you might have. Grazing Management for Beginners (Grazing 101) is an opportunity to learn from the ground up, the basic management of beginning and maintaining a solid stand of forage for your livestock operation. This program will be Tuesday, June 8, 2021, beginning at 7:00 PM EST. It will be offered online through ZOOM.

During this free virtual workshop, participants will learn management practices like proper soil sampling, grazing management (stocking rates, grazing heights, etc.), rotational grazing and fescue management. All livestock producers are welcome to participate no matter your experience level. Sometimes it is good to refresh some of these practices and see if you can improve on what you are doing.

The program is free but you MUST register online at: <https://go.ncsu.edu/grazing>. For more information, contact Cooperative Extension in Davie at 336-753-6100 or Yadkin at 336-849-7908.



## **HELPING YOUR PASTURES THROUGH THE SUMMER**

It's hard to believe that with all the rain we had in 2020 and the first couple of months in 2021, we would be hoping for some rain. Yes, at the time of this newsletter, it's true, we are getting dry and could use some rain. There is nothing we can do about the rain but there are a few management practices you can implement to help you cope if grass gets a little short. We are seeing some effects of rising temperatures and falling rain amounts. The cool season grasses (fescue, orchardgrass, etc.) are slowing down and some have headed out. The inconsistent temperatures a few weeks ago hastened the seed head formation and slowed down the grasses. If you have some warm season forages, you might be in a better position. But when we are lacking moisture, most pastures will produce less grass which could put our grazing livestock in a bad position. We are still early in this game and by following a few management practices, you might be able to help your grass continue to grow and provide your livestock quality forage.

# Implement Rotational Grazing: By moving livestock from paddock to paddock, you give your grass a rest and that allows it to rejuvenate and start to regrow. We all feel better after some rest and so does our grass. You can influence livestock to eat older tougher forage and weeds instead of letting them go to waste. You get a better more even distribution of manure which is good for your fertilization program.

# Fence in unused areas with temporary fence and use for grazing. There are plenty of grass areas that are not fenced in that have usable forage just waiting to be grazed. Look around your farm for these opportunities. Just make sure they have access to water. You might be surprised at the places around the farm you could temporarily graze.

# Implement a good weed control program: If you have not treated for weeds yet, look at your options. Weeds are thieves who like nothing more than to steal water and nutrients from the forages you work so hard to grow. They crowd out grass and many taste bad or have thorns which keep livestock from grazing the forages close to the weeds. Weed control is an easy way to improve the quality and quantity of forages you provide your livestock.

# Watch your Stocking Rate: TOO MANY animals on TOO FEW acres leads to "diseases" like "Extreme Bovine Anemia", "Extreme Equine Anemia" and a few other species related anemias. These "Made-up disease names" have nothing to do with the animals losing blood. These issues occur when there are TOO MANY animals on TOO FEW acres, sucking the life blood out of the forage and land. Stocking guidelines are designed to provide some flexibility and allow the grass to not be overgrazed during abnormal situations. Make sure you don't overstock your pastures.

# Plant Summer Forages: planting warm season forages will add a dimension to your grazing that should hold up better during the hot dry times of summer. Lots of options to fit your livestock and grazing program.

# Reduce herd numbers. Wean early. Supplement with feed. These have positive sides and drawbacks. They can help stretch your grazing but could increase purchased feed cost. Push a pencil on these options.

We still have decent grass but, the situation could change quickly. Using some of the above options now will help reduce the possibility of running short of grass this summer. Don't wait too late to make adjustments. Livestock were designed to get most of their nutrition from grazing. When grass gets short, livestock can become thin and lose production. Even worse, it could lead to increased health issues. We are all busy but it's in your best interest (and your livestock's) to assess your grazing situation, look at options and make plans to provide plenty of quality grazing for your herd. As livestock producers, that is your responsibility.

## **HERD HEALTH TO-DO LIST FOR LIVESTOCK**

- \* Vaccinate equine (horses, donkeys, mules) against West Nile Virus and Eastern Equine Encephalomyelitis. Take precautions to minimize standing water where mosquitoes breed.
- \* Check pastures for toxic plants/trees and treat accordingly. Repair fences, barns and working facilities.
- \* Keep a close eye on ALL livestock grazing lush forage growth for potential problems.
- \* Be vigilant in your war against worms & flies! Use the most cost effective options.
- \* Mow pastures to keep seed heads down to reduce eye irritation, reduce weeds and keep forage in growth stage.

## **AVOID HAY BARN FIRES**

Hay making time is upon us, so it is time to not only think about harvesting, but also plans for long-term storage. Spring rains can rush farmers in the hay making process and bale hay a little wetter than normal and with this the possibility of spontaneous combustion and fires increases drastically. Hay fires have occurred up to two months after hay has been placed in the barn.

**Cause of Hay Fires:** Hay fires usually occur within six weeks of baling but can happen at any time. They can also occur on any "style" as well: loose hay, small bales, large bales, stacks, stored inside or outside. Hay baled with high moisture content provides the optimal condition for bacterial growth. As these bacteria multiply, they release heat into the bale and can cause an internal temperature of 130-140° F. Eventually the microorganisms will die but more bacteria may replace them before the temperature decreases to a "safe" level. The higher the moisture, the longer the bale will remain at a high temperature which increases the chance for fire.

Hay stored with moisture content above 20-25 percent favors the growth of fungi. Once hay heats up, chemical reactions take over and can increase temperatures to the point of spontaneous combustion. With "wet" hay packed tightly in bales and stacked together in large quantities, fires are very possible. Whether the hay in this situation actually starts to burn or not depends mostly on the size of the stack and the material surrounding it.

If hay is stacked loose and sufficient cooling occurs at the same rate as the heat is generated, the hay may simply caramelize and turn brown or simply mold. However, if there is enough hay on the outside part of the hot spots to prevent the escape of the heat, and the carbon, nitrogen, oxygen and moisture levels are right, a fire will eventually occur due to spontaneous combustion.

**Measuring Temperatures:** If you suspect that your hay may be heating up, the temperature can be measured and monitored by using the following process: Drive a pointed two inch pipe into a hay bale and lower a thermometer on a string down into the pipe. Wait 10-15 minutes for the temperature to stabilize then pull out and read the thermometer. Repeat in several bales. If a thermometer is not handy, drive a solid rod or pipe into the center of the bale and after 15-20 minutes withdraw the rod and if it is too hot to hold in your hand, the situation is critical. The temperature should be determined and appropriate action taken.

**Actions to Take:** If temperatures are below 140 degrees F there is not any danger, unless it is early in the process. When the temperature is between 140-160 degrees F, you need to check bales on a daily basis.

If temperatures rise above 160 degrees F, check it every two-three hours and prepare to move the hay from the building and spread out so that air can get around the bales.

If the temperature reaches 180 degrees F, notify the fire department, insurance company if the building is insured, and remove all equipment and/or animals from the area. With fire equipment on hand (not just a fire extinguisher), remove bales to the outside and do not stack, place in rows for easy access. Also, hay under these conditions may flame up as fresh air strikes it or smolder in a pile for weeks. If bales ignite, soak with water and force some water into the center of the bales. If the bales do not ignite, try to save the hay by allowing the bales to simply cool down. Continue to monitor the internal temperature of the bales.

The best way to prevent a hay fire is to bale at a 20% or lower moisture content. The microbial activity significantly decreases when the moisture content is lower. Some ways to decrease the moisture content in your hay include: baling under appropriate conditions, using proper equipment, and possibly using hay preservatives. Baling under appropriate conditions is one of the most effective ways to prevent moisture buildup. The recommended time frame for baling is later in the day, having a slight wind, and humidity of 50% or less.

You can separate wet bales or those with uncured hay in them and store outside. You may need to bust the bale so that additional ventilation and drying can occur. Check these bales periodically for heat buildup.

Do not store hay with moisture content above 30 percent unless treated with a preservative.

**VACCINATE EQUINE AGAINST MOSQUITO-BORNE DISEASES:** If you have not already done so, equine owners are encouraged to have their equine vaccinated against Eastern Equine Encephalomyelitis and West Nile Virus. April until November is prime mosquito-breeding season in North Carolina and when equine are at risk if not properly vaccinated. EEE is fatal 90 percent of the time and WNV has a fatality rate of 30 percent. Both diseases are preventable by vaccination.

Equine owners should talk to their veterinarians about an effective vaccination protocol to protect them from mosquito-borne diseases. The combination vaccination initially requires multiple injections for horses, mules and donkeys that have no prior vaccination history.

Mosquitoes can breed in any puddle that lasts for more than four days, so removing any source of standing water can reduce the chance of exposing animals to WNV or EEE. Keeping horses in stalls at night, using insect screens and fans and turning off lights after dusk can also help reduce exposure to mosquitoes. Insect repellants can be effective if used according to the manufacturer's instructions.

Symptoms of EEE include impaired vision, aimless wandering, head pressing, circling, inability to swallow, irregular staggering gait, paralysis, convulsions and death. Once an equine has been bitten by an infected mosquito, it may take three to 10 days for symptoms to appear. Symptoms of WNV include fever, weakness or paralysis of hind limbs, impaired vision, head pressing, seizures and aimless wandering.

If your equine exhibit any symptoms of EEE or WNV, contact your veterinarian immediately. People, equine and birds can become infected from a bite by a mosquito carrying the diseases, but there is no evidence that horses can transmit the viruses to other horses, birds or people through direct contact. It's also a great time to make sure your animal is current on its rabies vaccination. In North Carolina we see about five cases of rabies in livestock each year

### **MOISTURE CAN LEAD TO MOSQUITO ACTIVITY**

We all love the warmer weather but with that warm weather, mosquito activity increases. All the moisture we received a while back could increase the mosquito activity. Before planning your chemical assault on the biting menaces, you can put a dent in populations by using some tips to reduce mosquito breeding grounds around your home or barn. Mosquitoes take advantage of water-filled objects as breeding sites. If you have not done so, search for and correct problems before mosquitoes become unwelcomed guests the next time you are outdoors.

It is important to do a "Yard and Barn Check" to identify and eliminate mosquito breeding grounds. Mosquitoes must have standing water to breed. Eliminating standing water sources drastically reduces mosquito populations. Empty buckets, tires, dishes under potted plants and tarp coverings. Other water-collecting items need to be emptied, inverted, or discarded. Birdbaths make great observation posts for watching mosquito larvae and alert you to an impending invasion. It's wise to flush out the birdbath often. Same thing applies to outdoor pet water bowls. Livestock water troughs out in pastures can be a little tougher since they're not always as easily flushed out.

Unclog rain gutters as decaying leaf material and other debris attract mosquitoes. Downspouts should direct water away from the house and not create a big puddle. Rain barrels that collect runoff, need to have the openings screened. This helps keep out the junk and the mosquitoes out as well.

Use a good insect repellent on yourself and your horse (when riding) to reduce the potential of a mosquito bite. Wear long pants and long sleeved shirts when the potential for a mosquito attack is high. Avoid activities when mosquitoes are most active, such as early morning and dusk. Talk with your neighbors as mosquito control takes a community effort. If your neighbors don't take action, then their mosquitoes might decide to pay you a visit sometime.

During warm damp weather, the potential for an increase in the mosquito population is high. Take action now to reduce the potential in your yard, barn and surrounding area. For more information on mosquito control, contact Cooperative Extension in Davie at 336-753-6100 or Yadkin at 336-849-7908.