

# Forage Team Newsletter



UNIVERSITY OF GEORGIA  
EXTENSION



## In This Issue

**Watch out for Moldy Hay**

**Troubleshooting Oat Problems**

**Should I Burn my Hayfield?**

**Importance of Potassium**

## Connect with us!

[www.georgiaforages.com](http://www.georgiaforages.com)

[Forage Team Blog](#)



[Georgia Forages Facebook Page](#)



[Georgia Forages Twitter](#)



[Georgia Forages YouTube Channel](#)



## Watch out for Moldy Hay

By Lucy Ray  
Morgan County

While not always on the forefront of our mind, mold in hay can be a problem for livestock. Particularly in years like 2021, where we have had a lot of moisture and humidity during harvest. Not only did the wet summer we had increase our chances of mold, but it made producing quality hay more difficult. The biggest factor contributing to digestibility in hay is the growth stage in which it was cut. Although it may seem strange, years when it is very wet can be just as difficult on a hay producer as years when it is very dry. It is harder to get in the field to actually harvest a crop. When we have a shortage of hay, many producers are forced to feed less than ideal quality hay and mold can once again become a challenge.

*cont'd p.2*

Mold can grow on hay with moisture levels above 14-15%. Mold growth produces heat and can result in large amounts of dry matter and TDN (total digestible nutrients) loss. In some cases, that heating can be enough to cause spontaneous combustion and fire. Drying of stored hay is enhanced by increased ventilation, creating air spaces between bales, and reducing stack size. However, dry hay will draw moisture from humid conditions, particularly on the outer 6-12" of the exposed surface. Any moisture level above 20% on the surface can result in mold growth and levels greater than 30% can result in the stack's entire surface becoming covered in black sooty mold.

Molds are more of a hazard in non-ruminant animals than in ruminants. Horses, in particular, are noted as being susceptible to moldy forages. Mold can cause respiratory issues such as RAO (recurrent airway obstruction) and is thought to be a contributing factor to COPD (Chronic Obstructive Pulmonary Disorder) which is commonly known as heaves. This is doubly true if forage is not fed in a well ventilated area or if it is extremely dusty. Increased mold growth can cause what we describe as "dusty" hay as well. Feeding or keeping horses outside can help cut down on the effects of dusty or moldy hay. Mold can cause significantly higher rate of digestive upset or colic issues in horses due to the anatomy of their digestive tract. Colic is one of the most common illnesses in horses, so eliminating moldy hay from a diet greatly decreases the possibility of colic in your herd. Slightly to moderately moldy hay, (spore counts up to 1 million cfu/gram) is relatively safe if fed to cattle and small ruminants. While cattle are less affected by mold, certain molds can cause abortions or aspergillosis.

For more information on hay quality and forage testing contact your local UGA Extension Agent.

## Troubleshooting Oat Problems

By Savannah Tanner  
Emanuel County

Using oats as grazing and/ or baleage can sometimes be challenging however; in most years, oats can one of the healthiest and best options for our livestock. Some (most) years, UGA Extension gets calls concerning oats that are discolored, not growing great, or sometimes even dying. Unfortunately, there isn't always a great answer for why. Things that can be going on with oats include disease, insects, frost or freeze damage, or general plant stress (lack of water, etc.). This year was no different. In the past four to five weeks, I have been on numerous calls concerning oats that are just not doing great. In a large portion of those calls, the oats have been reddish in appearance, stunted, and in serious situations- dying back. In this case, the oats here in Emanuel County have been significantly water stressed since planting. Add a frost to already stressed oats, we see some worrisome effects. Fortunately, this time it appears that the oats will grow out of their stress as we received roughly two inches of rain last week to correct the water stress.

To ensure you see minimal concerns, stresses, and yield reductions within your oats there are some key factors to keep in mind.

- Oats are less winter hardy than wheat or rye and will suffer substantial yield loss when the temperature falls below 20 degrees.
- Oat variety is very important and will affect disease resistance, winter hardiness, maturity, and yield potential.



- Seed treatments and quality play a huge role in oat production and its success. Seed treatments are typically inexpensive and assist in protecting the seed from seed and soilborne diseases. Certified seed has been tested for germination and is typically already covered with a seed treatment. In a situation where, certified seed is not used, it is important to use quality seed and adding a seed treatment to maintain good growing conditions and disease prevention techniques.
- Planting dates are also important in oat production. While it's been rather mild this winter, frosts and those one or two nights of low temperatures can do a number on our oats. Oats that are in a more advanced growing stage are less susceptible to winter kill than plants that are in the seedling stage. Utilizing the prime planting dates for your area maximizes the chances of producing a good crop and minimizes loss due to winter and cold stress.
- The first step to growing a good crop is growing a good root system. Soil testing and fertilizing accordingly will assist you in ensuring that your crop has the nutrients need to grow forage, seed, and a root system to maintain the plant.
- Other factors to remember includes pest management. Weeds, disease, and insects can be problematic when growing oats and can lower yield and quality. Be sure to used scouting techniques, labeled products, and follow the label on those products to decide if and when treatment may be needed.

While some of our oats got off to a dry and stressful start this year, we are hopeful that we will have good growing conditions for forage production this winter. If you have questions about your forages this winter, be sure to contact your local extension agent.



# Should I Burn my Hayfield?

By Jeremy Kichler  
Colquitt County

There are often many questions surrounding the practice of burning pastures and hayfields. Let's look at the more frequently asked.

## *Is it a good idea to burn my hayfield?*

There are several benefits to burning your hayfield. Burning can help producers manage thatch in their stands. If the thatch layer becomes too thick over time, several issues can be created. For example, this past year in my area, leaf spot diseases were severe in numerous hayfields. Thatch can tie up nutrients and be a "spore reservoir" for leaf spot diseases. Thick thatch layers can also hinder or delay green-up, reduce water infiltration into the soil and make the establishment of winter annuals a challenge. Other benefits of burning include improving the first cutting of hay and managing spittlebugs. If you would like more information on leaf diseases, it can be obtained below.

## [Dealing with Forage Diseases](#)

### *When do I need to burn off my hayfields?*

The optimal time of year to burn is just before spring green-up. Producers that choose to burn early could face the challenge of an early flush of weeds. If the hayfield is burned after green-up, then early season growth can be suppressed, resulting in a loss of yield.

### *Do different bermudagrass varieties respond differently?*

Producers need to know that varieties such as Tifton 85, Tifton 78, and Coastcross can be damaged by burning due to being more stoloniferous. These varieties do not produce an extensive root system. It is suggested that you burn these varieties with a head fire rather than a backfire. A backfire burns into or against the wind, resulting in a slower, hotter fire.

If a backfire has to be used on these varieties, then consider initiating the burning operation early in the morning or right after the rain. These management tactics could result in a cooler, less injurious fire. Bermuda grass varieties such as Alicia, Coastal, and Russell are more rhizomatous, thus making them more tolerant to burning.

### *Can I just light the match whenever I want, or do I need to let somebody know?*

Producers need to find out about permits and restrictions before burning. Please contact your local county Extension agent. They can help with obtaining that information if needed.

### *What else do I need to know about burning my hayfield?*

Please take no chances with dealing with fires and have a plan. A person in charge or fire boss needs to be appointed. Producers need to establish fire lanes to manage the burn. Firelines need to be at least 6 feet wide around the field that is going to be burned. Consider plowing a 10 to 12-foot fire lane if you are dealing with fields in the 5 to 10-acre range or larger. A fire lane can be made wider by using a backfire. Producers need to watch the local weather before implementing a prescribed burn. Please pay attention to wind direction, speed, and moisture to ensure that the fire does not jump the fire breaks. According to several references, it is not suggested to burn if the wind speed exceeds 10 to 12 mph. Wind direction is a factor to consider during the planning process. Hay producers need to avoid burning during times when the wind could potentially blow smoke in the direction of houses or roads.

Burning is a cheap and effective means of removing thatch and managing foliar diseases and weeds in bermudagrass production. If this is utilized, please have a plan so it can be used effectively. A great resource to study for planning a bermudagrass burn is Dr. Don Ball's Use of Fire in Bermudagrass Management

<http://www.aces.edu/pubs/docs/A/ANR-0989/index2.tmp>

If you have any questions about this subject, please contact your local county Extension agent.



# Importance of Potassium

By Carole Knight  
Madison County

Potassium is an essential element in plants and is considered one of the three macronutrients, along with nitrogen and phosphorus. The amount of K is reported in almost all routine soil samples. Unfortunately, with price increases, it has gone from being the least expensive to the most expensive of the three macronutrients. Ignoring the importance of potassium fertilization and not maintaining adequate soil levels can lead to forage losses and ultimate stand decline.

Potassium is essential for producing economical yields and maintaining persistence in our forages. The role of potassium is extremely important. Potassium regulates the enzymatic processes that are necessary for growth. It helps regulate water use. Potassium assists with the plants ability to withstand extreme temperatures, drought and pests. Therefore, it affects plant vigor, disease resistance, forage quality, and winter survival. Poor K fertility has been shown to be one of the top 10 reasons for forage stand loss in Georgia.

Soil type and environmental conditions have an effect on the amount of potassium available for plant use. Availability is highest under warm, moist conditions in soils that are well aerated with a neutral or slightly acidic pH. Soils that are too wet can reduce potassium uptake. In addition, soils with a high clay make-up can have reduced potassium availability; as well as very sandy soils where leaching can be an issue.

Symptoms of potassium deficiency include yellowing of the lower leaves and, in severe cases, leaf-tip dieback. Once symptoms are present, the plant's ability to withstand stress conditions, such as high heat, drought and pests, is diminished. A bermudagrass stand may be very old before it begins to exhibit severe stand thinning as a result of K deficiency. However, some varieties are more prone to K deficiency problems than others. For example, "Alicia" is very susceptible to leafspot diseases when K deficiency occurs.

The amount of potassium needed is dependent upon the level of management. For instance, there is a high demand for potassium in a hayed bermudagrass field compared to one that is grazed. This is due to the amount of potassium removed in the hay. Each ton of bermudagrass hay will often contain the equivalent of more than 40 lbs. of K fertilizer (K<sub>2</sub>O). High-producing bermudagrass hayfields may yield well over 10 tons per acre. As a result of this high rate of nutrient removal, K deficiencies occur frequently. Potassium amounts should be applied in relation to your yield goals.

Research has shown that stands can recover if given adequate K supplementation. Soil tests should be taken and potassium fertilization recommendations adhered to. It is important to split K applications across two or more application times to prevent excess K uptake. For more information refer the UGA publication - "Soil and Fertilizer Management Considerations for Forage Systems in Georgia".

[https://secure.caes.uga.edu/extension/publications/files/pdf/B%201346\\_4.PDF](https://secure.caes.uga.edu/extension/publications/files/pdf/B%201346_4.PDF)

**\$25**

# GRASSMASTERS

THURSDAYS AT 6:30



All materials will be mailed to your door. To guarantee all materials are in hand by start of class, please register by **January 7th**.

To register, please follow the link below:  
<https://tinyurl.com/GrassSpring2022>

A zoom link will be emailed out prior to each meeting.

For questions,  
please contact  
your local county  
extension agent or  
email  
[satanner@uga.edu](mailto:satanner@uga.edu)

Jan 20th: Introduction  
Jan 27th: Hay Production  
Feb 3rd: Forage Quality  
Feb 10th: Grazing Management  
Feb 17th: Pest Management  
Feb 24th: Fertilization  
Mar 3rd: Rainfall & Precision Ag



UNIVERSITY OF GEORGIA  
EXTENSION



United States Department of Agriculture  
Natural Resources Conservation Service



## UGA Forage Team

### Northwest District

Steve Morgan  
[smorgan@uga.edu](mailto:smorgan@uga.edu)  
706-628-4824

Roger Gates  
[roger.gates@uga.edu](mailto:roger.gates@uga.edu)  
706-278-8207

### Northeast District

Lucy Ray  
[lray@uga.edu](mailto:lray@uga.edu)  
706-342-2214

Carole Knight - Editor  
[clh@uga.edu](mailto:clh@uga.edu)  
706-795-2281

### Southwest District

Jeremy Kichler  
[jkichler@uga.edu](mailto:jkichler@uga.edu)  
229-616-7455

### Southeast District

Savannah Tanner  
[satanner@uga.edu](mailto:satanner@uga.edu)  
478-237-1226

Peyton Sapp  
[psapp@uga.edu](mailto:psapp@uga.edu)  
706-554-2119

The UGA Forage Extension Team presents



SPOTLIGHT  
SERIES

## Emerging Opportunities with Herbicides

Thursday, March 31, 2022  
6:30pm - 7:30pm  
Online via Zoom

Guest Speaker:  
Sam Ingram - Corteva Agriscience

*Commercial and Private Pesticide CEU available*

To register visit the link below or use QR code:  
[https://ugeorgia.ca1.qualtrics.com/jfe/form/SV\\_3yGixIPiis8pqce](https://ugeorgia.ca1.qualtrics.com/jfe/form/SV_3yGixIPiis8pqce)



An Equal Opportunity, Affirmative Action, Veteran, Disability Institution

