



JANUARY 2021

# KAY COUNTY AGRICULTURE MONTHLY

## EXTENSION

### Spring Management of Wheat

#### **Josh Bushong, Area Extension Agronomy Specialist**

For supposedly being in a La Nina weather pattern, late fall has been a blessing for most wheat producers in northern Oklahoma in terms of receiving moisture and even accumulating some good growing days. Time will tell in the rest of winter will turn cold and dry as predicted. Wheat grain producers are starting to initiate or at least plan out some spring management practices. Topdressing season has already started and potential weed, insect, and disease issues are on the horizon.

As far as how late can wheat be topdressed with nitrogen, field research conducted by OSU the past four seasons has shown it might be later than you think. These grain only trials have proven that topdress applications made 80-100 growing degree days after planting, typically early to mid-March, overwhelmingly yielded the same as early and late winter applications. Wheat quality, particularly grain protein, seemed to increase with later nitrogen applications as well.

This doesn't mean to wait till the last minute to topdress, but this supports extending the window to apply nitrogen. Applying later in the season can increase nitrogen use efficiency. As the crop progresses, a better estimation of grain yield can be more accurately determined and topdress rates can be altered accordingly. If covering large acreage, wheat producers should initiate topdress applications sooner to allow enough time to get the job done especially if weather delays application.

Topdressing tank-mixed with an herbicide can be an economical option. Since the sprayer will be using a broadcast nozzle, such as (Cont. Pg. 5)

### **Don't Forget to Water this Winter**

#### *David Hillock, State Master Gardener Coordinator*

Lack of adequate soil moisture is often a major cause of winter damage. Dry soil coupled with strong winter winds can cause havoc on a plant. All plants, but especially narrowleaf and broadleaf evergreens, use water during winter. When little or no soil moisture is present, plants can become desiccated and it is more likely root damage will also occur.

When dry cold fronts are predicted, water the landscape at least 24 hours in advance of the front. Apply about  $\frac{1}{2}$  inch of water at the time of watering. A sunny day on moist soil helps warm the soil and root area thus reducing the amount of time the roots will be exposed to cold temperatures.

Moisture must be available below the frost line or frozen soil. When the soil freezes, if moisture is not present in soil pore spaces, moisture is pulled from plant roots to form the ice crystals resulting in desiccated roots, thus what some would refer to as "winter kill."

Of course, some common sense needs to be practiced at this time of year; do not allow the sprinklers to come on during a hard freeze. (Cont. Pg. 4)

### **Kay County OSU Extension Office**

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#### **Social Media**

Facebook: Kay County OSU Extension  
Twitter/Instagram: @CountyKay  
YouTube: Kay County OSU Extension



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*Hack and spray is an easy method to thin forest overstory and remove undesirable trees. The increased sunlight stimulates many valuable understory plants that wildlife and livestock use.*

## **Thinning Forests for Wildlife, Livestock, and Aesthetics**

### **Dwayne Elmore, OSU Extension Wildlife Specialist**

Most private forest land in Oklahoma has a dense overstory (often >80%) that prevents sunlight from reaching the ground during much of the year. Many landowners are interested in thinning their forest to achieve wildlife, livestock, and/or aesthetic objectives. Decreasing canopy cover to <60% results in a dramatic herbaceous, vine, and shrub response in the understory which can increase the carrying capacity for white-tailed deer and wild turkey. Further reducing the canopy cover <40% can increase bobwhite numbers and increase native warm season grasses for cattle forage. While prescribed fire alone can be used to open the overstory, it can take many years

to achieve. Using a herbicide application with individual tree selection to make the initial thinning can speed up the process and allows the retention of desirable trees and removal of undesirable trees depending on the specific objectives. Prescribed fire can then be used as needed to maintain the appropriate structure and composition.

There are several methods that can be used to thin forests, but hack and spray or girdle and spray is often the simplest and most desirable. This is especially true for non-commercial timber that is larger diameter and has thick bark. The hack and spray or girdle and spray method can be used any time of

the year except for during spring sap flow (March-early May). Fall is an excellent time to use to use these techniques due to cooler weather and lack of ticks. The only downsides are that tree identification and estimating canopy cover are more difficult once leaves drop.

For most tree species in Oklahoma, the herbicide imazapyr is very effective for hack and spray. If using imazapyr, you will need a spray bottle and a hatchet. Choose a hatchet with a longer handle that is weight forward as this will make work easier. Apply one hack mark for every 3" DBH (diameter at breast height) of tree. The hack marks should penetrate the outer bark and just into the (Cont. Pg. 3)

# Thinning Forests (Continued)

inner bark (cambium). Then, apply 1 milliliter (usually 1-2 sprays from most spray bottles) of a solution with 75% herbicide product (apx 28% active ingredient) and 25% water. Hacks should be at a downward angle (about 45°) to form a cup that can hold the herbicide solution. After making the hack, open the hack wound slightly and spray the herbicide solution into the wound to allow for herbicide to enter the cambium. Then remove the hatchet. Do not overspray to the point that herbicide runs down the bark to the soil as imazapyr is soil active. Use chemical gloves and eye protection as imazapyr is caustic and can cause eye injury. If using this method, you will get it on your face, so eyewear is a must.

Imazapyr is not effective for hackberry/sugarberry (*Celtis* genus) and is less effective at killing legumes such as redbud and locust. If you wish to control these species of trees, you can mix the herbicides triclopyr and imazapyr (50% triclopyr, 50% imazapyr). For these tree species that are not susceptible to imazapyr, you will need to be completely girdle the tree with a chainsaw or the hatchet marks need to overlap. Fill the entire wound (entire diameter of the tree) with the herbicide solution. A triclopyr solution can also be used alone. This solution should be 50% herbicide product (apx 44% active ingredient) and 50% water. Apply the solution to the entirety of girdle or the overlapping hatchet wounds. Only use the amine formulation of triclopyr whether mixed with imazapyr or used alone (look at chemistry description on front page of chemical label for the word amine, or triethylamine salt). Many triclopyr products are the ester formulation which is not as effective for hack and spray or girdle and spray.

If you are only removing smaller diameter (<6" diameter at base) thin-barked tree species (e.g. tree-of-heaven, maple, locust, privet, sweetgum, willow, and ash), a basal bark application of herbicide can be used. A backpack sprayer will be needed as this method requires a lot of solution for each tree but you do not need to wound the tree with a hatchet or chainsaw. For basal bark, the entirety of the stem must be coated with the herbicide solution. It is recommended to spray from the base of the stem (at ground level) up apx 12" and fully coat the entire circumference of the stem. Leaving an unsprayed portion of the stem will reduce effectiveness. For this method, use the ester formulation (look at chemistry description on front page of chemical label for the word ester) of triclopyr. The recommended herbicide solution is 25% herbicide product (apx 60% active ingredient) and 75% oil. The oil acts as a surfactant preventing the herbicide from running down the stem and allowing time to penetrate the outer bark (this is why this method only works on small thin barked stems). Diesel or kerosene can be used in place of crop oil.

## UPCOMING EVENTS and DATES

### **January-February 2021 – Grain Marketing Coffee Shop**

Weekday Mornings (See Pg. 5)

January 22<sup>nd</sup>, January 27<sup>th</sup>, February 3<sup>rd</sup>

Shannon Mallory, Trent Milacek

Dr. Derrell Peel (Ranch Drive Location)

### **February 4<sup>th</sup>, 2021 – Kay County Master Gardener's Monthly Meeting**

9:30a.m.-10:30a.m.

First Thursday of Every Month

Presented Virtually over Zoom

### **March 13<sup>th</sup>, 2021 – Whitetail Deer Management in the Off Season**

Stagecoach Event Center, Newkirk, OK

Speakers: OK Department of Wildlife Conservation, OK

Prescribed Burn Assoc., OSU Extension Specialist, USDA-NRCS



# Gardening Tips for January!

## ***David Hillock, State Master Gardener Coordinator***

### Lawn & Turf

- Remove leaves from cool-season grasses or mow with a mulching mower. ([HLA-6420](#))
- Continue mowing cool-season lawns on a regular basis. ([HLA-6420](#))
- Continue to control broadleaf weeds in well-established warm- or cool-season lawns with a post-emergent broadleaf weed killer.

### Tree & Shrubs

- Select a freshly cut Christmas tree. Make a new cut prior to placing in tree stand. Add water daily.
- Live Christmas trees are a wise investment, as they become permanent additions to the landscape after the holidays.
- Light prunings of evergreens can be used for holiday decorations. Be careful with sap that can mar surfaces.

### Flowers

- Apply winter mulch to protect rose bush bud unions and other perennials. Wait until after several early freezes or you will give insects a good place to winter.
- Poinsettias must have at least six hours of bright, indirect light daily. Keep plants away from drafts.

### Fruits & Nuts

- Cover strawberry plants with a mulch about 3-4 inches thick if plants are prone to winter injury.
- Wait to prune fruit trees until late February or March.

### General

- Keep all plants watered during dry conditions even though some may be dormant. Irrigate all plantings at least 24 hours before hard-freezing weather if soil is dry. ([HLA-6404](#))
- Order gardening supplies for next season.
- Now is a great time to design and make structural improvements in your garden and landscape.
- Send for mail-order catalogs if you are not already on their mailing lists.
- Christmas gift ideas for the gardener might include tools, garden books and magazine subscriptions.
- Make sure indoor plants are receiving enough light or set up an indoor fluorescent plant light.
- Till garden plots without a cover crop to further expose garden pests to harsh winter conditions.
- Visit your county extension office to obtain gardening fact sheets for the new gardening season.
- Join a horticulture, plant or urban forestry society and support community “greening” or “beautification” projects.
- Review your garden records so you can correct past mistakes. Purchase a new gardening journal or calendar to keep the New Year’s gardening records.

## **Don't Forget to Water this Winter (Continued)**

Ice forming on some plants could result in some serious damage and you could create a hazardous situation for you, pedestrians, or even passing vehicles.

Too much water can also result on problems during the winter. Cold wet soils can lead to rotting roots. Soils with more than ample moisture may also encourage winter weeds to germinate and flourish. Water only every three to four weeks and apply only enough water to moisten the top six or so inches of soil.

Do not forget plants growing in aboveground planters protected from rain. They need watering even in a wet season. Also, remember to water plants that are located under the eaves of a building or home since they often receive little natural precipitation.

## Spring Management of Wheat (Continued)

a flat fan, Urea Ammonium Nitrate (UAN) rates should be limited to 10 to 20 gallons per acre depending on conditions. Applications should be avoided when air temperatures rise above 70° and relative humidity is low. Applications should be made prior to jointing stage, which will limit yield loss by allowing more recovery time if crop injury occurs.

Disease management has shown to have good yield savings over the years. If applied timely, most commercially available fungicides have had good yield protection in OSU field trials. If only one application is budgeted, it is best to apply late and protect the flag leaf. Long-term OSU data typically average about 10 to 20 percent higher yield compared to no fungicide.

The OSU variety trial near Lahoma has evaluated more than 45 wheat varieties with and without a fungicide applied around the boot to flagleaf growth stage. There was only an average of seven percent yield advantage this year, but specific varieties varied from zero to 17 percent difference. Including all varieties at Lahoma over the past seven years, there has been an average of a 19.2 percent higher grain yield over when a fungicide was applied.

Timely field scouting is the only way to determine if a pest is present and if an application of an herbicide, insecticide, or fungicide is warranted. The only way for one of these pesticides to protect yield and have a positive return on investment would be knowing what pests are present and knowing how much yield potential can be saved if applied correctly.

## Extension Experience – Insights into Oklahoma Agriculture Podcast

The Northwest Area Extension Staff would like to announce the creation of our new podcast *Extension Experience*. The *Extension Experience* podcast is brought to you by Josh Bushong, Trent Milacek, and Dana Zook. Each week they provide perspective on Agriculture topics and offer insight from our experience working with Extension Educators and Producers across Oklahoma.

The *Extension Experience* podcast is available on Spotify, Google Podcasts, and Apple Podcast platforms. You can also access the episodes on spotlight, <http://spotlight.okstate.edu/experience/>

## Kay County Grain Marketing Coffee Shop Program 2021

Last year, along with the help of our local grain elevators and chemical company, I held Grain Marketing Coffee Shops to share about building a grain marketing plan. We had so much fun we are going to do it again! I will be speaking on Grain Options, and how to use it in your marketing plan. This year I have asked Trent Milacek, West Area Ag Economics Specialist, to join at all three locations, and give a Grain Marketing Update. I have also asked Dr. Derrell Peel to join at the Farmer's Cooperative Association Ranch Drive Location and give a timely Livestock market update.

- Friday, January 22<sup>nd</sup> @9:00a.m. Farmers Grain - Nardin
- Wednesday, January 27<sup>th</sup> @ 9:00am, Farmers Cooperative Elevator - Braman
- Tuesday, February 2<sup>nd</sup> @ 8:30a.m., Farmers Cooperative Elevator - Ranch Drive (Dr. Derrell Peel Speaking)

## Looking for 2021 Kay County Junior Livestock Show Sponsors

We are looking for general sponsors for the 2020 Kay County Junior Livestock Show. If you donate by January 31, 2021, we can put your name on the livestock show banner and/or banquet program as a **Platinum** (\$1000+), **Gold** (\$250+), **Silver** (\$100+), or **Friend of Livestock Show** (\$50+) sponsor. If you are interested in becoming a general sponsor, please contact the OSU Extension office at (580)362-3194 or [Shannon.mallory@okstate.edu](mailto:Shannon.mallory@okstate.edu), or simply mail a check made out to Kay County Free Fair Inc. to

Kay County Free Fair Inc.  
Attn: Livestock Show Sponsor  
P.O. Box 185  
Blackwell, OK 74631-0185

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Shannon Mallory, Extension Educator, Agriculture/4-H Youth Development

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**KAY COUNTY  
EXTENSION**

«business»  
«attn»  
«address»  
«city», «st» «zip»