Fall is here and when we switch seasons our duties in the field of Agriculture also changes. Fall harvest is in full swing for our row crops, wheat producers are planting wheat for next year crop and the cow/calf guys are thinking about weaning calves. The duties of the Kansas Farmers gear up for a busy fall before the winter cold sets in. Others have changes too, our vegetable gardens are producing one last harvest and some of our flowers might be as pretty as ever, here in the October. Here at K-State Research and Extension, we are also preparing for the colder months to come. Agents all across the state are planning their next educational series and programs. Trainings and classes are being attended on a weekly basis. 4-H is excited to kick off enrollment for a new year. This past year, I think we have all learned new ways and methods to educate ourselves and kept us in a very productive mood, no matter what the circumstances are bought before us. Please remember that K-State Research and Extension is always here for you, as we are just a visit, phone call or e-mail away.
Time to prep for winter? You bet, always be prepared

Focus on home and car before the weather turns cold

It’s early October…do you know where your snow boots are?

You may not really need them for a while, but assistant state climatologist Mary Knapp says now is about the right time to start preparing for winter.

“A couple things you can do right now to get ready for winter is to look at preparations around your house and car,” said Knapp, who has worked for Kansas State University for more than three decades.

Around the house, the work begins outside by cleaning up damaged branches from summer storms, particularly anything hanging over power lines or the home’s roof. That’s important because if we get strong winds or an ice storm, you have less chance that it’s going to take down your power.

Another thing is to look at disconnecting your hose and covering outside faucets so they don’t freeze and break. The last thing is to cover your air conditioner, or remove window air conditioners. You won’t likely need that during the winter months and you don’t want to create a portal for cold air to get into the house.

I suggest covering windows or screens, or any area where cold air can seep into the home. Doing this in the month of October is a lot easier than waiting till the north wind is blowing snow in the dead of winter.

“With your automobiles, make sure they are in good maintenance shape,” Knapp said. “Check the tread on tires, top off fluids, switch windshield fluid from bug removal to something more tolerant of cold temperatures, and check antifreeze levels so that you have enough for colder conditions.”

Other maintenance have-tos include checking that the car’s battery is holding a strong charge, replacing windshield wipers and building a winter weather emergency kit.

The essentials in an emergency kit include:

- Flashlight and batteries
- Blankets
- Gloves
- Hat
- Snacks
- First Aid kit
- Boots or waterproof shoes
- Bottled water

In addition, check to be sure that you have a good ice scraper, snow brush and jumper cables. Road flares, tire chains and a short tow chain can also be useful.

When you’re traveling out of town, one of the first things to do is check what the weather outlook is along your route…and anticipate what kind of conditions you might encounter. Also let somebody know when you’re going, what route you’re taking and what time you’re planning to arrive. You may not be able to get a cell signal wherever you are stranded, so it’s important to have that backup in place before you get on the road. Just a little planning ahead can turn a terrible problem into one that can be worked out.

Farmers Market
Every Saturday
7:30 a.m. - 12:00 Noon
Chief Building (Blue Roundtop)
700 West Woodside
McPherson, Kansas
Control Woody Plants on Rangeland: Basal Bark and Cut-Stump Herbicide Applications

Late summer and fall can be an excellent time to treat unwanted stands of woody plants. Scattered stands of individual trees should either be treated individually using the basal bark method (for labeled plants less than 4-6 inches in diameter) or the cut stump treatment method. The basal bark and cut stump treatments will not be effective if the plants cannot be treated down to the soil line. Avoid conditions where water (or snow later in the season) prevents spraying to the ground line.

Basal bark application method

Producers can treat smaller diameter susceptible woody plants individually this fall by spraying the basal stem parts with triclopyr plus diesel fuel. The lower 12-15 inches of the stems or trunks of susceptible small trees should be thoroughly wetted on all sides with a triclopyr-diesel mixture. Triclopyr goes by the tradenames Remedy Ultra and Pathfinder II. Remedy Ultra is a 4 lb/gallon product. The labeled recommendations for Remedy Ultra are 20-30% solution in diesel. Pathfinder II is a ready-to-use product and does not have to be mixed with diesel. PastureGard HL is a premix of triclopyr and fluoroxypr, and can be applied as a basal bark or cut-stump treatment as a 25% solution in diesel. Crossbow, a mixture of triclopyr and 2,4-D, can also provide control of certain woody plants as a 4% solution in diesel. Milestone, with the active ingredient aminopyralid, is effective on black and common honeylocust. Mix Milestone 5% v/v with a compatible basal oil; e.g., Dyne-Amic from Helena Chemical. Before selecting a basal oil, do a jar test by mixing Milestone and basal oil to determine compatibility.

Cut-stump method

If the woody plant is greater than 6 inches in diameter, the best method is to:

-- Cut it off at ground level.
-- Treat the cut surface with triclopyr and diesel fuel within 30-60 minutes, before the sap seals over the exposed area.
-- Spray the cambium and light-colored sapwood to insure translocation of the herbicide (Figure 1).
-- Treat any exposed trunk or exposed roots.

The stump of ash, cottonwood, elm, oaks, persimmon, willow, and Russian olive can be treated with a 1:1 ratio of dicamba (Clarity, Sterling Blue) in water instead of triclopyr if desired. The stumps of Eastern red cedar do not need to be treated since, unlike many woody plants, this species does not root sprout. Simply cutting Eastern red cedar below the lowest green branch will kill it. Common trees in Kansas that re-sprout after cutting include: ash, cottonwood, elm, oaks, osage orange (hedge), persimmon, black and common honey locust, saltcedar, and Russian olive. In sprouting species, new shoots arise from dormant buds at or below the ground often resulting in a multi-stemmed clump.

Figure 1. Treat the cambium tissue for cut-stump treatments.

Table 1. Cut-Stump Herbicides

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Active ingredients per gallon</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossbow</td>
<td>2 lb 2,4-D + 1 lb triclopyr</td>
<td>4% in diesel</td>
</tr>
<tr>
<td>Remedy Ultra</td>
<td>4 lb triclopyr</td>
<td>20-30% in diesel</td>
</tr>
<tr>
<td>Pathfinder II</td>
<td>0.75 lb triclopyr</td>
<td>Ready to use</td>
</tr>
<tr>
<td>PastureGard HL</td>
<td>3 lb triclopyr + 1 lb fluoroxypr</td>
<td>25% in diesel</td>
</tr>
<tr>
<td>Milestone</td>
<td>2 lb aminopyralid</td>
<td>10% in water</td>
</tr>
<tr>
<td>Sterling Blue/Clarity</td>
<td>4 lb dicamba</td>
<td>25-50% in water</td>
</tr>
<tr>
<td>Roundup PowerMAX</td>
<td>5.5 lb glyphosate</td>
<td>50-100% in water</td>
</tr>
<tr>
<td>Arsenal</td>
<td>2 lb imazapyr</td>
<td>10% in water</td>
</tr>
<tr>
<td>Tordon 22K</td>
<td>2 lb picloram</td>
<td>10% in water</td>
</tr>
<tr>
<td>Capstone</td>
<td>0.1 lb aminopyralid + 1 lb triclopyr amine</td>
<td>Undiluted</td>
</tr>
</tbody>
</table>

1 Trade names are used to help identify herbicides. No endorsement is intended, nor is any criticism implied of similar products not mentioned.

Common honeylocust can re-sprout from a wide diameter area around the main plant because of root suckers. One option is to make a basal bark treatment with triclopyr-containing products to kill the entire plant in the fall. Then the main plant can be cut down in subsequent years once the tree is dead. Cut-stump applications of Milestone as a 10% solution in water has been more effective than triclopyr on common honeylocust.
Soybean Dry Down Rate Before Harvest

The latest USDA-National Agricultural Statistics Service crop progress and condition report released September 21 classified 45% of the soybean crop to be in good or excellent condition. Overall, 48% of all soybeans in Kansas are dropping leaves, well ahead of 23% last year and a five-year average of 34%.

Weather outlook

The weather conditions expected for October will be critical for soybeans as related to seed filling and determining final seed weight.

Current conditions have been cooler-than-average and temperatures are expected to continue to trend cooler than normal during the next 8- to 14-day period. The current October outlook does suggest an increased chance for warmer-than-normal conditions to return for the rest of the month. Drying may still take a significant amount of time, as typical October temperatures are much cooler than September. There is a strong chance for drier-than-normal conditions for both the short term (6-10 days), and October as a whole. Keep in mind that there is a significant drop in normal rainfall amounts from September to October as we move into a typically drier part of the year.

Soybean dry down

Soybeans will reach final maturity with high seed water content, moving from 90% to around 60% from beginning of seed filling until final maturity. Final maturity is defined as the formation of the black layer in the seeds. The dry down rate will depend on the maturity group (affecting the length of the season), planting date, and weather conditions experienced during the latter part of the reproductive phase.

Changes in the water content during the seed-filling process (Figure 1) were previously described in our “Soybean Growth and Development” poster. As described for corn, seed water loss for soybeans can also divided in two phases: 1) before “black layer” or maturity, and 2) after black layer. For understanding the changes in water content before “black layer”, visit the previous article in Issue 816 (August 28, 2020) related to the contribution of seed filling to yield: https://bit.ly/3j6p5Wu

Figure 1. Soybean seed filling process from full seed to full maturity. Photo and infographic prepared by Ignacio Ciampitti, K-State Research and Extension. Taken from Soybean Growth and Development, MF3339.

To address the question related to the dry down rate for soybeans, a study was conducted to investigate the changes in water content from black layer formation (maturity) until harvest time (Figure 2). During the last days of September and mid-October 2016, the overall dry down rate was around 3% per day (from 58% to 12% seed moisture) – taking an overall period of 15 days.

Figure 2. Grain moisture dry down (orange line) across three hybrids and different N rates near Manhattan, KS. Horizontal dashed lines marked the 58% seed moisture at black layer formation. * Graph prepared by Ignacio Ciampitti, K-State Research and Extension.

*Note: It is desired to reach harvest with 13% seed moisture to maximize the final seed volume to be sold, thus the importance of timing harvest with the right seed moisture content.

Soybean dry down rate was three-time faster, 3% per day, relative to corn at 1% per day. These dry down rates for corn and soybeans are primarily affected by temperature, humidity, and overall water content at the point of black layer formation (maturity). These main factors should be considered when the time comes to schedule soybean harvest.
<table>
<thead>
<tr>
<th>Species</th>
<th>Herbicides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ash</td>
<td>Crossbow, Pathfinder II, PastureGard HL, Barvel/Clarity, Arsenal, Capstone</td>
</tr>
<tr>
<td>Common honeylocust</td>
<td>Remedy Ultra, Pathfinder II, PastureGard HL, Milestone, Sterling Blue/Clarity, Tordon 22K, Capstone</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>Crossbow, Remedy Ultra, Pathfinder II, Sterling Blue/Clarity, Arsenal, Tordon 22K, Capstone</td>
</tr>
<tr>
<td>Elm</td>
<td>Crossbow, Remedy Ultra, Pathfinder II, PastureGard HL, Barvel/Clarity, Arsenal, Tordon 22K, Capstone</td>
</tr>
<tr>
<td>Oaks</td>
<td>Remedy Ultra, Pathfinder II, PastureGard HL, Barvel/Clarity, Roundup PowerMAX, Arsenal, Tordon 22K, Capstone</td>
</tr>
<tr>
<td>Osage orange (hedge)</td>
<td>Remedy Ultra, Pathfinder II, PastureGard HL</td>
</tr>
<tr>
<td>Penstemon</td>
<td>Remedy Ultra, Pathfinder II, PastureGard HL, Sterling Blue/Clarity, Arsenal, Capstone</td>
</tr>
<tr>
<td>Russian olive</td>
<td>Crossbow, Pathfinder II, Sterling Blue/Clarity, Arsenal</td>
</tr>
<tr>
<td>Salt cedar</td>
<td>Remedy Ultra, Pathfinder II, PastureGard HL, Roundup Power MAX, Arsenal</td>
</tr>
<tr>
<td>Willow</td>
<td>Crossbow, Remedy Ultra, Pathfinder II, PastureGard HL, Roundup PowerMAX</td>
</tr>
</tbody>
</table>

Application equipment for cut-stump application includes pressurized hand sprayers, small backpack sprayers, sprayer mounted on ATV with handheld gun, hydraulic tree shears or saws with an attached spray nozzle, or even a paint brush. Two of the more common pieces of equipment for cutting the woody plants are the turbo saw and the hydra clip. Figure 2. Turbo saw left and hydra clip (right).

Although exposure to animals is reduced by basal and cut-stump treatments, grazing and haying restrictions still need to be followed. There are no restrictions before grazing with any of the herbicides discussed. Check labels for restrictions for use prior to hay harvesting, removal of animals before slaughter, and for use around lactating dairy animals.

Application tips for using cut-stump treatments
- Always follow directions on the herbicide label.
- Before spraying, brush any sawdust or debris off cut surface.
- Apply herbicide to freshly cut stump.
- Spray cut surface and stump to ground level.
- Spray exposed roots above soil surface.
- The cambium layer is the critical area to spray.
- Apply enough liquid that it pools on cut surface

Safety, Design Top Priorities When Designing Cattle Processing Facilities

Many a rancher will say there is nothing that tests the bonds of a relationship more than processing cattle together. Between the quick movements of the calves and the short tempers of the humans it can be a trying experience for all.

One way to help ease some of the potential for frustration is to make sure cattle are worked through good facilities. You should start with evaluating your current set-up. Look at the age of the facility and the types of materials within the structure. If the facility is 50 years old with gates made of wood panels patched together and there are drainage issues, it might be time for a total rebuild. However, the experts agreed that a total rebuild isn’t always needed and that many facilities can be improved with a remodel that will strengthen the pens and improve safety for all involved. Any cattle handling facility needs to be safe for both the people and the cattle. The materials need to be sturdy and the gates need to be placed so that people can open them safely and cattle can move through them easily.

K-State Research and Extension encourages cattle producers and their employees to attend a stockman’s training to get advice on how to best work with the cattle.

Here were the top tips that the experts offered when planning a facilities remodel:

* Determine the appropriate scope of the project. Is it a simple repair or an involved remodel?
* Attend a stockman’s school to learn how to best use the facilities.
* Visit other facilities to do research.
* Consider both human and cattle safety in the design.
* Build with the appropriate size and strength of materials for your class of animals.
* Plan accordingly to make sure you are maximizing the facilities investment.
Welcome to Fall! The start of a brand new 4-H year! I want to congratulate everyone who participated in the Kansas State Fair. I know things were very unique this year, but so many of you stuck with it and made the best of the offerings! You can find all results online. www.fairentry.com/Fair/Results/14323 Take a look and congratulate your fellow 4-H'ers!

Now it is time to start thinking about the new 4-H year, what goals you will set and what you will learn and accomplish in 2020-2021. Please remember that all enrollment is done online! Beginning Oct 1 you can re-enroll for the year and pick new projects as well as update your participation (health) form! This will be done on the updated 4-H Online 2.0 this year! Check out additional information later in the newsletter. The $15 Kansas 4-H Program Fee continues and can be paid with a credit card on 4-H Online or a check sent to the State 4-H Office. This fee must be paid upon enrollment. Remember, you can log in at any time during the year to keep up on your project enrollment and check your information.

As we continue through this unique time and stay aware of social distancing, masks, sanitation, etc- please do reach out if you have any new ideas and suggestions to improve what is being done! The most important goal is that we can attempt to reach everyone and do it in a model that they feel comfortable with! There may be extra tasks this year for our teens and parents to take on either in your clubs or county-wide and I encourage you to be open to helping everywhere you can! Thank you for your grace and patience with all as we embark on this new 4-H year!

~ Lindsey

Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 1</td>
<td>4-H Council, 7 pm</td>
</tr>
<tr>
<td>Oct 4-10</td>
<td>National 4-H Week</td>
</tr>
<tr>
<td>Oct 7-18</td>
<td>Paper Clover Fundraising Week</td>
</tr>
<tr>
<td></td>
<td>Tractor Supply Company</td>
</tr>
<tr>
<td>Oct 10-11</td>
<td>484H (Service Weekend)</td>
</tr>
<tr>
<td>Oct 29</td>
<td>Officer Training (ZOOM)</td>
</tr>
<tr>
<td>Nov 1</td>
<td>Achievement Celebration (TBA)</td>
</tr>
</tbody>
</table>

4-H Online 2.0

Enrollment begins October 1! The 4-H Online system is transitioning to Online 2.0. We hope to have better information about differences in this system and help guides for new and returning families soon! Those planning to re-enroll, when you log into 2.0 for the first time, you should use your same username and password from the previous 4-H Online log-in. You will visit https://v2.4honline.com/ for enrollment starting Oct 1. Watch your emails and Facebook page for further information!
Achievements

It turned into an interesting year, but Wow! Look at how much you still learned and achieved! Mark your calendars and come celebrate with us on Sunday, November 1. The celebration will look a little different this year, but the committees’ goal is to provide an opportunity to be able to meet in person to celebrate all of the achievements. Final plans are in the works and an invitation will be sent out soon to all members!

Paper Clover

It is time again for the Paper Clover Campaign hosted by Tractor Supply Co. Between Oct 7 and Oct 18 customers can add $1 (or more) to their bill to support 4-H! Share with your friends. The store would also LOVE for 4-H’ers or clubs to come out during the event to promote the campaign by showing projects, talking about 4-H, helping carry things out for customers, etc. The more visible 4-H is, the more money will come back our direction! All money from this years campaign will go towards camp scholarships! Please contact Tractor Supply for ideas or to set up a time to come out! Maybe they would even have a spot for your poster or window display for the contest!

Calling All 4-H’ers 12 and Older!!!

A new 4-H year is about to kick off and it is time to decide what you would like to do for the year! Well if your 4-H age this coming year will be 12 or older you are invited to be a Junior Leader! If you are interested in this opportunity of leadership, service and fun, make sure to pick the project: Leadership: Jr. Leaders on 4-H Online to get all the informational emails! A kick-off meeting will take place on October 10 at 7:15 PM! This will be an outdoor meeting where we will talk briefly about the year and then enjoy a socially distanced outdoor movie! Please RSVP to the Extension Office by Oct 7! We are also looking for an adult volunteer to help plan and carry out activities with this group in 2021!

Adult Chaperone

Typically McPherson County 4-H has an adult chaperone application to gauge interest on chaperoning area and state events. Due to many things possibly being different this year, we will not be asking for a specific form. Instead, PLEASE let Lindsey know if you would be willing to be called should a chaperoning possibility arise. Other ways you can help include working with the McPherson communications program, Jr Leaders, Ambassadors, any specific project support and other ideas you might have!

Kansas Youth Leadership Forum...
November 21-22, 2020

Come and build your leadership skills and potential through workshops, consulting groups, inspirational speakers and more. Though this event will be virtual for 2020- that does not mean it won’t teach and inspire you! Details and available class sessions will be available soon! KYLF is for all youth 14-18 years old before Jan 1, 2021.

https://www.kansas4-h.org/events-activities/conferences-events/kansas-youth-leadership-forum/index.html

Don’t forget that each qualifying 4-H member is eligible for one activity scholarship a year (this does NOT include the OzSome 4-H Camp Scholarship). The application can be found online: http://www.mcpherson.k-state.edu/4-h/awards-recognition/scholarships/index.html Don’t forget to check it out if you want to attend any area or state camps or events... KYLF (above) would qualify!

Communications Curriculum

Kansas 4-H has rolled out a new program, asking counties to consider adding a Communications Curriculum to their club meetings. The lessons will be provided to volunteers within a communications workbook. The state will host a series of training/support ZOOM meetings to help volunteers with plans to teach the lessons.

It would be awesome if McPherson County had a few volunteers step forward that would help their clubs engage in these activities or even do some online lessons to invite all members and other youth to attend! Communications is the foundation of so much of what we do- extra activities and learning will continue to enhance this skill for our youth! Anyone will be able to teach these lessons with the workbook and support! Would you, or do you know of someone who could help our youth in this way?

4-H Council

It’s a new council year! Let’s start it off with a bang and every club in attendance! Council Representatives are a VERY important officer position in your clubs! Plan to meet at 7 PM on Oct 1 at the Extension Office. Remember, each club should have two youth and two adult representatives! This will be our election of officers meeting. Please be thinking about the leadership role you would like to take. Please email Lindsey with your interest!
Fair Board Members Needed

The 4-H Fairboard consists of rotating members each year. That means the group is always in search of new members! If you enjoy the 4-H Fair and would be interested in making it happen, consider applying to be a member of the fairboard. We are looking for youth and adult members to help us plan, organize and run the fair. The applications are available in the Extension Office or can be emailed to you! This deadline has been extended to October 15. The McPherson County Extension Executive Board makes the final appointments for this group. If you have questions contact Lindsey.

Officer Training

This year Officer Training will look a little different. The event will be held virtually on Oct 29, 7:00 p.m. It will still be a collaborative event with McPherson County and Central Kansas District. We will have session leaders, videos made by your 4-H peers and interactive activities during the training! Watch your email and Facebook page for the registration link in the coming weeks!

We are still looking for many session leaders. Please let Lindsey know if you would be willing to help with this years event! We would be happy to assist any session leader with the technology!

484H

What is 484H?? 48 Hours for 4-H’ers to serve our communities and make an impact on the state! According to The 4-H study of Positive Youth Development, 4-Hers are nearly 4 times more likely to make contributions to their communities. But just how much can they do? In one weekend this fall, 48-Hours of 4-H will challenge club members, adult leaders and 4-H alumni to explore their service capabilities and inspire the community around them by taking part in some type of service project during the weekend of October 10-11, 2020. Remember to report your work to the Extension Office!

It’s time for... National 4-H Week!!! Do you have an idea of how to promote 4-H to others? Now is the time to do it! National 4-H Week is October 4-10. Many clubs are planning activities or promotional things during this time. Participate in those, or invite a friend to your 4-H meeting! Spread the word and let people know what you do and learn in 4-H!

To celebrate National 4-H Week, think about entering the annual window display or poster contest! These are open to everyone. Contact Lindsey with questions or if you need space ideas!

There will be two contests for National 4-H Week this year!

1. Clubs or groups can enter a Window Display promoting 4-H. Think of where these might be located... store fronts, school entry way or display case, libraries, etc. These do not HAVE to be in a store window! Displays can be located in any public space within the county. Remember to get permission!

2. Individual Poster Contest. 4-H members can create a standard size poster promoting 4-H. Posters can have any theme the entrant would like. These need to be hung in a public place for the week!

Both contests will be judged for top awards! Entries will need to have short video (or picture for posters if you choose) that is posted to the McPherson County 4-H Facebook page or emailed to Lindsey. The video can be a simple phone capture, but should show the display/poster well and can include any other info you would like the judge to know. Videos ust be under 2 minutes. Entries need to be in place with videos completed no later than October 6. Let us know what type of entry you have and where it is located when you email/post the video! Have fun and think outside the box... time to tell people how awesome 4-H is! Awards will be announced at Achievement Night!
A Proud 4-H'er Lives Here
Happy National 4-H Week!

NATIONAL
4-H WEEK
OCTOBER 4-10, 2020

K·STATE
Research and Extension
4-H
GROWS HERE
RETURN SERVICE REQUESTED

AGENT CONTACT INFORMATION

Lindsey M. Mueting
County Extension Agent
4-H Youth Development
Lmueting@ksu.edu

Shad Marston
County Extension Agent
Agriculture and Natural Resources
smarston@ksu.edu
Radio: Friday, 7:25 a.m.

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