Welcome to Fall! The start of a brand new 4-H year! I want to congratulate everyone who participated in the Kansas State Fair. McPherson County was well represented and did amazingly well! I hope you all made it to Hutch to see the exhibits on display! You can find all results online. [https://fairentry.com/Fair/Results/3226](https://fairentry.com/Fair/Results/3226) 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 2019-2020. Please remember that all enrollment is done online! Beginning Oct 1 you can go in to your 4-H Online profile and re-enroll for the year and pick new projects as well as update your participation (health) form! 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. If a club is paying this cost for you, it will need to be reimbursed after your payment is made. Remember, you can log in at any time during the year to keep up on your project enrollment and check your information.

~ Lindsey

### Calendar of Events

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### Fairboard 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 and Family Event

The annual Officer Training and Family Event will be held on Saturday, October 12 at Salina South Middle School. This event is open to ALL ages of youth and volunteers. Whether you are an elected officer or not, there are sessions for YOU! And double the FUN because this event includes Central Kansas District and McPherson County.

The day will begin with registration at 9:15. We will have a special speaker and two sessions to pick from this year! The event will conclude at noon. Thanks to First Bank Kansas there is no cost for this event and there is also a provided optional lunch following the training! This will be right before the Tailgate Service Project Party! Registration with breakout sessions can be found at www.tinyurl.com/2019OTFE. Registration is due October 7.

There are a few sessions that we still need leaders for and other tasks to complete. Please let Lindsey know if you would be willing to help with this years event!

Tailgate Service

Following OTFE on Oct 12 will be a Tailgate Service Project Party! This will begin at 1 PM at Salina South Middle School. The optional lunch hosted by First Bank Kansas will begin at noon! During this special 484H event 4-Hers will have areas set up in the school for attendees to complete service projects! Members have been working hard to plan hands-on projects for you to participate in! Come make a big impact in a small amount of time as you walk through areas and participate in as many or few as you have time for! A list of items 4-Hers are collecting as donations will be sent out with registration! There will be one link for Officer Training & Family Event and this project- sign up for one or both!

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 12-13, 2019. This year we have the opportunity to participate in the Tailgate Service Party- come help with that or plan your own project for the weekend! Remember to report your work to the Extension Office!

K-State Research and Extension

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 6-12. 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 must be under 2 minutes. Entries need to be in place with videos completed no later than October 8. 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!
Paper Clover

It is time again for the Paper Clover Campaign hosted by Tractor Supply Co. Between Oct 9 and Oct 20 customers can add $1 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!

Kansas Volunteer Forum

Held at Rock Springs the same time as KYLF is a special event just for adults! Come learn knowledge and skills that will help you continue to help youth see new possibilities, opportunities and learning. Check out more information on the KYLF link listed above. Register for both events at Kansas Leadership Weekend: https://www.kansas4-h.org/events-index.html Check out the Adult Chaperone form if you are interested in attending this event FOR FREE as a McPherson County Chaperone!

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 29 at 7 PM! Please RSVP to the Extension Office! We are also looking for an adult volunteer to help with this group in 2020!

Kansas Youth Leadership Forum...
November 23-24

Come and build your leadership skills and potential through workshops, consulting groups, inspirational speakers and more. Check out the available class sessions online now!

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

In addition, the 2020 State 4-H Youth Leadership Council will be elected at KYLF. Registration and info is online and will be due by November 1, 2019. KYLF is for all youth 14-18 years old before Jan 1, 2020. 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!

Stem Day Camp

Save November 16 for an exciting morning of being with friends and learning about STEM! 8-12 year olds will be exploring all kinds of things like robots, coding and looking at the world of technology! Day Camp will be held at Lincoln Elementary School in McPherson with registration at 8:30 AM. We will conclude the day at 12:15. This event will be open to 4-H members and non-members so invite your friends! Look for registration info in the coming weeks!

Adult Chaperone

McPherson County 4-H is looking for volunteers willing to help with many groups and activities! Some of these are area and state trips! Please ask the Extension Office for an Adult Chaperone form to declare your interest in specific event!

Summer Fun

We might have just entered fall, but it’s not too soon to start planning for summer! The 2020 OzSome Camp Dates are June 16-19.

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 3 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!
Farm Financial Skills for KS Women in Agriculture

We are excited about the program and hope it will fit your needs as well. Here are a few more details.

The Goals of the program are:
1. Participants will understand the structure of a balance sheet, income statement and cash flow
2. Participants will perform hands-on financial activities with a case farm where they will have the opportunity to do performance analysis and benchmarking to understand how financial statements can assist in management decision-making
3. After exposure to the role of financial statements in making informed management decisions, participants will decide to increase their use of financial management techniques on their own operations
4. Participants will develop a financial management plan for their own operation including key dates of when financial statements will be developed and analyzed
5. Participants implement their financial management plan to strengthen their operations for long-term sustainability

The Dates for the program:
Wednesday evening, January 15, 22, 29 and Feb 5 and please save the next Wed in case of weather issues. Dinner will be provided as part of the program. It starts at 5:30 p.m. and finishes by 8:30 p.m. Keynote speaker will be broadcast via Zoom. There will be a facilitator at each location to lead group through a hands-on case farm activity; case farms will be crops/livestock and a CSA/vegetable sales example will also be provided. The keynote speaker will come back to go over activity and answer any questions. Participants will receive a farm financial management book

Registration: $40 per participant; scholarships may be available. Registration will open in late October, early November. Be watching for more information. McPherson County plans to be a host location at our meeting room. Please feel free to share and invite others to participate. Can’t make them all; we understand, but hope you can.

Affordable Care Act

The 2019 Open Enrollment Period runs from Thursday, November 1, 2018, to Saturday, December 15, 2018. If you don't act by December 15, you can't get 2019 coverage unless you qualify for a Special Enrollment Period. Plans sold during Open Enrollment start January 1, 2019. Aug 30, 2018 Affordable Care Act Open Season

Affordable Care Act Navigators are getting harder to find. GraceMed has hosted one in the past at their location on specific days. Jana McKinney will assist as well. Please be sure to bring your username and password for your Healthcare.gov account when you make your appointment.
Join us for The Silent Epidemic
A Real Story of Victory Over Severe Depression

Bring a friend. It’s free. Monday, November 11, 2019 at 7 p.m. at the McPherson High School theater at 801 E Kansas Ave in McPherson. Please use the parking lot off of First Street.

Mark and Nanette Potter will be sharing their real, relevant, and raw story of his personal experience with severe depression. You can learn more about Mark’s story at D2UP.org website. Mental health is real, it’s in McPherson County and Kansas and WE need to make a difference. It is a difficult conversation and a very personal one, but we must begin to “stomp” out the stigma that society attaches to it! Excellent help is available, resources will be shared at this program as well.

1 in 5 U.S. adults experience mental illness each year
1 in 25 U.S. adults experience serious mental illness each year
1 in 6 U.S. youth aged 6-17 experience a mental health disorder each year

Suicide is the 2nd leading cause of death among people aged 10-34

The Ripple Effect Of Mental Illness influences the Person, Family, Community and the World.
Across the U.S. economy, serious mental illness causes $193.2 billion in lost earnings each year.
Depression is the leading cause of disability worldwide.

It’s Okay To Talk About Suicide

Suicide is the 2nd leading cause of death among people aged 10-34 in the U.S.
Suicide is the 10th leading cause of death in the U.S.
The overall suicide rate in the U.S. has increased by 31% since 2001
46% of people who die by suicide had a diagnosed mental health condition
90% of people who die by suicide had shown symptoms of a mental health condition, according to interviews with family, friends and medical professionals
75% of people who die by suicide are male (but this number is changing).

Join the conversation, please. November 11, 7 p.m. McPherson High School theater. 801 E First Street, McPherson. It is a free program. Mark and his wife, Nanette will share their personal story. Please come.

Kansas Tobacco Quitline – Vaping too!
www.QuitNow.net/Kansas
1-800-QUIT-NOW (784-8669)
7 days a week, 24 hours a day

The Kansas Tobacco Quitline provides free, private, one-on-one, online or phone counseling to any Kansan ready to quit tobacco use. Smokers, spit-tobacco users, family and friends of tobacco users, and health professionals can e-mail, live chat or call the Quitline for help and information.

Quitting tobacco use is one of the best things you can do for your health.

The Kansas Tobacco Quitline has a high success rate. Four months after completing counseling with the Quitline, 41% of former tobacco users are still not using tobacco. Keep in mind that most tobacco users “practice” quitting a few times before they are successful. So if you slip up, try again. Take the first step to being tobacco free by calling the Quitline today.

‘People are dying from vaping,’ Kansas state health officials reported a second vaping death in the state. The latest fatality brings the total number of vaping deaths in the U.S. to nine. The vaping-related illness has sickened at least 530 people, the CDC said last week.
Medicare Open Season
October 15 - December 7 effective date January 1, 2020

Free help is available. Please contact Jana at the McPherson County Extension Office at 620-241-1523 to make an appointment, or Sondra Frank at the McPherson Senior Center. We are certified SHICK (Sr Health Insurance Counselors of Kansas) who work to provide free, unbiased, confidential information to help you know your options.

Using the Plan Finder at [www.medicare.gov](http://www.medicare.gov), we can look at the medicines you take, the pharmacy that you prefer and get a plan that covers your medicine as inexpensive as possible. You do not have to shop your plan, if you are happy with your current Part D Prescription Drug Program (PDP), you do not need to do anything. Annual Notice of Change letters were sent out recently from your company. Please, open your mail to see if the premium changed, the preferred pharmacy and how your medicines will be covered.

Last year, 700 people shopped their Prescription Drug Plan with Jana at the Extension Office and collectively saved $388,000 – you do not want to pay more than you need to for your medicine. Free help is available.

There will be 28 plans to choose from this year, starting with a premium as low as $13.20. The deductible will be $435; coverage gap will be a 25% copay.

**NEW:** This year, we are going to have to do Personalized Searches. This means you need to bring:

** Your Medicare Card
** A list of your current Medications
** We will create a Medicare account for you – unless you have then you will need to bring your user name and passwords with you.
** Also – what pharmacy you want to use.

It may take us a few minutes longer to search, but it is certainly going to be helpful in the future! Please call 620-241-1523 to make an appointment! October 15-December 7.

Freezing Yeast Dough

To save time during the holidays, or any time of year, prepare yeast dough ahead of time and freeze into dough balls for rolls to bake later. The trick is using a dough with extra yeast because slow freezing can damage yeast.

According to Fleischmann’s Yeast, it is best to use dough recipes developed for freezing. These recipes are high in yeast and sugar and low in salt. It is recommended to use bread flour to help maintain bread structure. After preparing and kneading the dough, shape into rolls or flatten into a disk and wrap airtight. The dough can be frozen up to four weeks. When ready to use, thaw at room temperature or slowly in the refrigerator. Once thawed, shape, let rise, and bake as directed.

Some examples of freezer dough recipes include:

http://www.breadworld.com/recipes/Freezer-Pizza-Dough
http://www.breadworld.com/recipes/Master-Bread-Dough

Other tips for prepping dough ahead for later use can be found at [http://redstaryeast.com/yeast-baking-lessons/postpone-baking/](http://redstaryeast.com/yeast-baking-lessons/postpone-baking/)
Homemade Solution Is Handy Kitchen Cleaner

Clean kitchen surfaces are a key ingredient to a healthy household, but that doesn’t mean consumers need to spend a lot of money on cleaning solutions.

An inexpensive, homemade cleaning solution - 1 teaspoon regular (unscented) laundry bleach, mixed with 1 quart water - is an often-recommended approach to cleaning and sanitizing food preparation surfaces in the kitchen.

While this solution is a standard with food safety pros, consumers should re-read their countertop care instructions before using any new cleaning product. Storage for the homemade cleaner can be a plastic or glass container with a re-sealable lid, kept out of reach of children and pets and labeled clearly.

Fast and Nutritious Breakfast Ideas

No meal is more important than breakfast. This is the meal that breaks the fast from the night before and stokes your metabolism. It's also the meal that gets the brain and body ready to face the day. Going without breakfast, especially for kids, puts them at a huge disadvantage in school and will not help them keep up academically, physically or emotionally even, with their breakfast-fed peers.

Need some ideas?

❖ Make extra pancakes, waffles or french toast, then, freeze them and reheat for a quick breakfast. You can even sneak in fruit or nuts for more nutrition and vary the taste.
❖ Another fast meal is eggs and toast. One or two eggs a week are a good source of protein, and you can prepare them in a variety of ways to keep it interesting.
❖ Muffins are as easy as 1,2,3 and a great grab and go breakfast. Add a juice box or a travel cup of milk and you're all set with time to spare.
❖ Cold cereal is a staple, but can get expensive, plus extra sugar. Look for store brands and cereals on the top and bottom shelves for the best prices.
❖ Oatmeal and other hot cereals are ideal a cold winter's day. There are a many flavors, plus you can add your own fruit.
❖ Cereal bars work in a pinch, but read the labels for sugar and fat content.

Also, if you get a headstart before your household wakes up; that might be the key to helping you prepare breakfast for your family and get yourself ready too.

Preserving Fall Tomatoes

Fall is almost here and gardeners may still have tomatoes to harvest. But once a frost or freeze occurs, those tomatoes should not be used for canning.

When tomato vines die, the acid level changes resulting in less acidic tomatoes. Even if recommended canning methods are used, these tomatoes will still be unsafe. The tomatoes can still be eaten fresh or frozen for later use.

Green tomatoes can be canned as a relish, salsa, or as regular tomatoes. Learn more at www.ksre.ksu.edu/bookstore/pubs/MF1185.PDF.
Control Woody Plants on Rangeland: Basal Bark and Cut-Stump Herbicide Applications

This 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.

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 fluroxypyr, 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.

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.
· Treat any exposed trunk or exposed roots.

Tordon RTU and Pathway can be used on cut surfaces in noncropland areas such as fence rows, roadsides, and rights-of-way. However, Tordon RTU, and Pathway are not labeled for use on range and pasture. Glyphosate labels vary on what sites are labeled for cut-stump application on rangeland. Roundup PowerMAX can be applied on any terrestrial site. Roundup ULTRA can only be applied as a cut-stump treatment on non-cropland. Be sure to check the label as rangeland is sometimes included as a site under non-cropland on some glyphosate labels.

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.

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.

More information can be obtained by Walt Fick, Rangeland Management Specialist whfick@ksu.edu
Fall Control of Bindweed

Field bindweed is a deep-rooted perennial weed that severely reduces crop yields and land value. This noxious weed infests just under 2 million acres and is found in every county in Kansas. Bindweed is notoriously difficult to control, especially with a single herbicide application. During the fall, but prior to a killing freeze, can be an excellent time to treat field bindweed -- especially in a year when good fall moisture has been received. This perennial weed is moving carbohydrate deep into its root system during this period, which can assist the movement of herbicide into the root system.

The most effective control program includes preventive measures over several years in conjunction with persistent and timely herbicide applications. The use of narrow row spacings and vigorous, competitive crops such as winter wheat or forage sorghum may aid control. No-till has been very beneficial for managing bindweed by providing routine herbicide treatments through time and not breaking up the root system and dragging root segments around the fields. No-tillage maintains much of the bindweed seed soil bank at a depth too deep to germinate. It is common to see a resurgence of bindweed after tilling fields that have been in long-term no-till.

Dicamba, Tordon, 2,4-D ester, Facet L (also generics) and glyphosate products alone or in various combinations are registered for suppression or control of field bindweed in fallow and/or in certain crops, pastures, and rangeland. Apply each herbicide or herbicide mixture according to directions, warnings, and precautions on the product label(s). Single herbicide applications rarely eliminate established bindweed stands.

Applications of 2,4-D ester and glyphosate products are most effective when spring-applied to vigorously growing field bindweed in mid to full bloom. However, dicamba and Tordon applications are most effective when applied in the fall. Herbicide treatments are least effective when applied when bindweed plants are stressed.

Facet L, at 22 to 32 fl oz/acre, a new quinclorac product that replaced Paramount at 5.3 to 8 oz, or QuinStar quinclorac products, can be applied to bindweed in fallow prior to planting winter wheat or grain sorghum with no waiting restrictions. All other crops have a 10-month pre-plant interval. Quinclorac products can be used post-emergence in sorghum to control field bindweed during the growing season. Additional noncropland treatments for bindweed control include Krenite S, Plateau, and Journey.

Considerable research has been done on herbicide products and timing for bindweed control. Although the research is not recent, the products used for bindweed control and the timing options for those products haven’t changed much since this work was done.

For more information on controlling bindweed, see 2019 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland, K-State publication SRP-1148.

Optimum Sowing Dates for Wheat in Kansas

Ensuring optimum sowing date and seeding rate are two steps needed to help achieve the maximum wheat yield potential in a given growing season (Figure 1). Sowing date affects yield potential due to stand establishment, soil and air temperatures to which the crop is exposed, tiller formation, disease pressure, etc. Optimum seeding rate depends on sowing date and its adjustment he crop will maximize its yield potential.

Sowing date

Optimum sowing date for winter wheat is quickly approaching for a large portion of Kansas. Depending on geographical location, optimum sowing window can start as early as September 10 and last until the end of September (northwest Kansas), or it can start as late as October 5 and last until October 20 (southeast Kansas). This gradient in sowing dates, with earlier dates in the northwest, is a function of temperature. Northern regions with higher elevations will have cooler air and soil temperatures earlier in the year as compared to southern regions.
Small Grain Forage Options For This Fall

Small grain forages can be a profitable option for producers. They can be planted in the fall and either terminated or grazed out in the early spring, allowing time to plant a summer row crop if soil moisture is adequate.

There are five common small grain options for forage: spring oats, winter wheat, winter barley, winter cereal rye, and winter triticale. Each option has strengths and weaknesses.

**Spring oats.** Spring oats are usually planted in late February or March in Kansas. However, spring oats can also be planted in August or early September -- and if done so, they will produce much more fall forage compared to other small grain forages in the fall before a killing freeze. They will almost never produce grain if planted in August. Spring oats do not need to vernalize before heading. They will develop rapidly in the fall if they have enough moisture and fertility, and may even head out before termination by the first hard freeze in the mid-20 degree F range, but in most years it will not have time to produce viable grain. In very mild winters, however, much of the spring oats planted in the fall might survive the winter in southern Kansas.

Spring oats can be utilized in the fall for either hay or grazing. Spring oats can be ready to graze 6 to 8 weeks after planting with adequate moisture and after a good crown root system has developed. Under good conditions, spring oats can produce up to 1 to 2 tons of forage per acre, but as planting is delayed past early August, expect less tonnage. Spring oats are not very drought-tolerant, and will not establish well or produce much forage if soils are very dry. Rye and barley are more drought-tolerant than spring oats.

Spring oats can also be planted in a mixture with a winter small grain. The spring oat will produce most of the forage in the fall and then most likely winter kill. The winter small grain will overwinter and produce forage in the spring. Winter small grain biomass production might be less than planted alone, but the combination of oat and winter small grain biomass will most likely be higher than winter small grain planted alone. If a mixture is used, plant oats at a 50% seeding rate and winter small grain at 100% seeding rate.

Spring oats should be seeded at the rate of 2 to 3 bushels (64 to 96 pounds) per acre. About 30 to 70 pounds of nitrogen (N) per acre will be adequate depending on forage potential and if no excess N is available in the soil.

Oat pasture can generally carry 500 pounds of beef per acre. Average daily gains range from 1.5 to 2.5 pounds per head per day.

Forage quality on actively growing oats is high, with protein content in the range of 20 to 25%.

Oats are fairly susceptible to atrazine, so if producers plan on planting oats this fall after corn or sorghum, there is risk of herbicide carryover that can kill seedlings.

**Winter wheat.** Wheat is often used for grazing and grain in so-called “dual-purpose” systems (Figure 1). These kinds of systems are usually balanced between getting good forage and good grain yields without maximizing yields on either side. Dual-purpose wheat is typically planted at a higher seeding rate and at least two weeks earlier than wheat planted for grain only, which can increase the risk of a wheat streak mosaic infection. In addition, producers wanting both grazing and grain should use a higher-than-normal seeding rate and increase the N rate by 30 pounds per acre for every 1,000 pounds forage yield.

Producers who need more pasture than normal can plant even earlier, at the likely expense of lower grain yields. Planting very early opens wheat to many risks, such as wheat streak mosaic, barley yellow dwarf, Hessian fly, grasshopper damage, and common root rot. If beef prices are more favorable in the spring, wheat can also be grazed out, foregoing grain yield altogether.

Wheat usually produces most of its forage in late fall and early winter, and again in the spring.

There are differences among varieties in how much fall forage is produced. Grow an awnless variety if planning on grazing the wheat out. For more information on dual-purpose wheat, please refer to the eUpdate article, “Managing wheat for forage and grain: the dual-purpose system”.

**Winter barley.** There are now new, improved varieties of winter barley available with better winterhardiness, especially under grazing. Many of the newer varieties also produce more forage than older varieties. Barley produces palatable growth rapidly in the fall under favorable conditions. It is considered superior to other cereals for fall and early winter pasture, but wheat, triticale, and rye provide better late winter and spring grazing. Barley has excellent drought and heat tolerance. Winter barley forage is typically the most palatable of the small grain cereals and feed quality is the highest, although tonnage of barely is usually less then triticale or rye.

**Winter rye.** Rye establishes fall pasture quickly. It also regrows rapidly in late winter and early spring. However, rye becomes “stemmy” and unpalatable earlier in the spring than other cereals. Since rye is less palatable and higher in fiber than wheat or barley, cattle gains during grazing are normally greater on oat, wheat, triticale, and barley pasture than on rye pasture. Rye is the hardeast of the small grain cereals for overall tolerance to drought, heat, winterkill, and poor soil conditions.

**Winter triticale.** Triticale, a cross between wheat and rye, possesses the toughness of rye along with the quality of wheat. It can be grazed much harder than wheat and still recover to produce grain. Triticale and rye can be planted about a month earlier than wheat with a decreased risk of wheat streak mosaic (while the triticale might not show symptoms of wheat streak mosaic virus infection, it may vector the mites that might affect a neighboring wheat field). However, there is still risk to grasshopper feeding in the fall, hessian fly, barley yellow dwarf, or root rot. Planting triticale or rye earlier in the fall increases the amount of fall forage available compared to winter wheat. Triticale has longer effective spring grazing than rye, but not as long as wheat. Depending on the variety, winter triticale will head later than rye so the forage can remain higher in quality later into the spring. Heading date on all winter cereals should be a consideration if spring grazing is the goal.
Small Grain Pasture Management

As planting dates get later in the fall, producers will get more fall forage production from triticale and rye. The later it gets; the more rye becomes the best option for fall forage needs.

When planting a small grain cereal primarily for forage, use a seeding rate about 50-100 percent higher than if the crop were grown for grain. In western Kansas and under dry soils conditions, a seeding rate of 1.5 bu/acre is recommended. In eastern Kansas or under irrigation, a seeding rate near 2 bu/acre is recommended. When planting a small grain cereal for grazing purposes, increase N rates by about 30 to 50 lbs/acre. To determine the actual amount of additional N needed, the following formula can be used:

\[
\text{Additional lbs N/acre} = \left( \frac{\text{Number of animals/acre} \times \text{lbs of weight gain/animal}}{0.4} \right)
\]

In a graze-out program, all the N may be applied in the fall. However, split applications will reduce the chances of having a problem with nitrate toxicity. In addition, there may be excess N in the fall from failed summer crops, so producers should use caution when putting on N without a profile N soil test. Under good growing conditions, a well-fertilized small grain dryland pasture can carry about 500 pounds of cattle per acre. Under poor growing conditions, stocking rates should be reduced considerably. Cattle gains of 1.5 to 2.5 or more pounds per acre per day are possible during periods of good pasture production. Under irrigation, with intensive management, much higher stocking rates are attained.

Fall grazing management is critical to the success of small grain pastures. Begin grazing when the plants are well rooted and tillered, usually about 6 to 8 weeks after planting. If the foliage is too tall when the animals are introduced, or if the crop is overgrazed, the plants will be more susceptible to winterkill. Make sure some green leaves remain below the grazing level. The minimum stubble height should be about 3 to 4 inches. Rye has a more upright growth pattern than most wheat varieties, so it should not be grazed as low. Winter barley is more susceptible to winterkill than rye or wheat. However, newer varieties of barley are exhibiting increased winter hardiness.

In terms of overall forage quality of hay, barley is highest, followed by oats, wheat, triticale, and rye. Yet, the forage quality of all small grains in the vegetative stage is more than sufficient for any grazing animal. During the fall and early spring periods of peak production, the crude protein content of small grain pasture is normally about 20-25 percent. Growing cattle require about 12 percent crude protein, thus no protein supplements are necessary.

Small grain pastures can cause bloat. Daily supplementation with poloxalene (Bloat Guard) is highly effective in reducing bloat and is available in many different feeding forms. Feeding high-quality grass hay, silage, and/or an ionophore such as Rumensin or Bovatec can also provide some protection against bloat. Rumensin and Bovatec have also been shown to increase stocker cattle weight gains on wheat pasture.

Cows with high milk production grazing small grain pasture in the spring can experience grass tetany. To prevent this, provide a mineral supplement containing magnesium. Cattle should be started on the mineral two weeks prior to the risk of grass tetany.

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Kansas Bankers Association Awards Nominations Due by November 4

Nominate a deserving Kansas producer or landowner for the 2019 Kansas Bankers Association Conservation Awards Program. This year, the Kansas Bankers Association, K-State Research and Extension, and the Kansas Department of Wildlife, Parks, and Tourism have announced six award categories: Energy Conservation, Water Quality, Water Conservation, Soil Conservation, Windbreaks, Wildlife Habitat

The purpose of this program is to stimulate a greater interest in the conservation of the agricultural and natural resources of Kansas by giving recognition to those farmers and landowners who have made outstanding progress in practicing conservation on their farms. Last year, 199 Kansas producers and landowners were recognized through this program. Nominations can be made by any person in the county. They should be sent to the County Extension Agricultural Agent or the Kansas Department of Wildlife, Parks, and Tourism District Biologist by November 4, 2019. For more information, see: http://www.agronomy.k-state.edu/extension/kansasbankersaward/kansas-bankers-awards.html