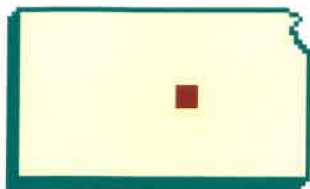


# McPherson County



K-State Research & Extension

600 West Woodside, McPherson KS 67460

620-241-1523 FAX 620-241-3407

[www.mcpherson.ksu.edu](http://www.mcpherson.ksu.edu)

**FEBRUARY 2021**



## Clover Corner

**Lindsey Muetting**  
**County Extension Agent**  
**4-H Youth Development**



Happy February! I know this continues to be a tough time for many of us as we think about activities and events in person we WANT to be doing and some of us dreading another Zoom meeting. However, I encourage you to think about the positives in our situations and, like the 4-H motto... how YOU can make it even better! Connecting together in activities, project sharing and learning can be very impactful! Have you done a project talk online to your club? Maybe you have been working on your project curriculum and have found an activity you would be willing to share with others in the county or know someone who could do a project meeting with others! I have several 4-H members and volunteers working to help continuing to offer activities, but we could use your ideas as well!! Also, please don't forget to re-enroll at [v2.4honline.com](http://v2.4honline.com) Remember, projects can be dropped or added until May 1, email or call the office with these changes! Keep learning and growing, no matter what! ~Lindsey

### February Dates

Feb 1	Development Fund Drive begins
Feb 4	4-H Council
Feb 4-5	Pick up bag for Secret Ingredient Challenge
Feb 11	Bring your 4-H Projects to Life-Entomology
Feb 11	Jr Leaders Exchange Meeting
Feb 14-15	Citizenship In Action
Feb 15	Office Closed
Feb 25	Jr Leaders Exchange Meeting

### Bring Your 4-H Projects to LIFE!

The next session will be held on Thursday, February 11 at 7 PM as we learn from the K-State Department of Entomology! **Be sure to watch email and the McPherson County 4-H Facebook page for registration link.** Remember, you do NOT have to currently be enrolled in the featured project to come explore and learn with us! We try to record all sessions, so please register even if you have a scheduled conflict.



## McPherson County FCS Interest Facebook Page

If some of your 4-H interests include Family and Consumer Sciences projects (Foods, Clothing, Fiber Arts, Family Studies, Consumer Skills, Child Development, Home Environment) please join our new Facebook Group! Ideas and opportunities related to these projects will be shared. The first post involving a SUPER fun challenge that any 4-H member can participate in has already gone live! (Also see information below!) [www.facebook.com/groups/mp4hfcs/](http://www.facebook.com/groups/mp4hfcs/)

### SUPER Secret Ingredient Challenge

This fun activity is virtual! Have you watched the cooking shows where contestants have to cook with a mystery ingredient? Let's give it a try over Super Bowl weekend! Register by commenting on the post within the FCS Project Facebook group or call the Office by Monday, Feb 1!

On Thursday or Friday, February 4th or 5th, participants can stop by the extension office to pick up a bag containing a mystery ingredient. Use that ingredient to make any dish of your choosing (main dish, dips, desserts, anything you like!). You may add any additional ingredients you want. You may use any amount of the mystery ingredient you choose (all of it or just a portion). Be creative and have fun searching for new recipes! Participants will post a picture of your completed dish and the recipe for all to see the completed products!

### 4-H Council

Council Representatives - Don't forget about the meeting on February 4 at 7 PM! We will be meeting on Zoom. Please make sure you have representation from your club! (2 youth, 2 adults) Find an alternate if you cannot make it! Remember we will be voting on 4-H Fair Themes! Make sure your club has submitted their top choice by Feb 1! If you are a council officer please make sure you are prepared for the meeting and log in about 10 minutes early!

### Publish Your News

If you have news, dates or activities to share with other 4-H'ers, get them in the 4-H Clover Corner! Articles, pictures or dates you would like in the March publication need to be to Lindsey by February 18. Email them to [Lmueting@ksu.edu](mailto:Lmueting@ksu.edu)



### 4-H Development Fund



The annual 4-H Development Fund Drive for McPherson County gets underway in February! Each 4-H club has a list of donors to contact. It is vital that all contacts are made to help us reach our goals and update our lists!! The goal of the development fund is to get youth out sharing their 4-H story and practicing communication skills as they complete each task. We know that there are some businesses that an in person visit is not feasible this year. We do however ask that all businesses on your list are contacted either in person, by phone or, this year, mail.

The Development Fund is an important part of the 4-H program. Contributions help in the following ways:

- Scholarships to 4-H Camp, Discovery Days, KYLF, National 4-H Congress, and High School Seniors
- New this year- 2 curriculum books for each member
- Fair Premiums
- Educational materials and supplies
- Record Book Awards
- T-Shirts for all new members
- Donor Recognition
- Leader Trainings/Recognition
- Family Fun Events and other activities

## 4-H Camp

We are in the process of planning for Oz-Some 4-H Camp 2021! We are to receive an update in March on the final status of camp and capacity numbers- but get June 24-27 on your calendar now!

**AGES** - Classification for camp eligibility will be calculated by 4-H Age. Rookie camp will be available for those 4-H age 7 and 8. Regular camp for 4-H age youth 9-12.

### **FULL TIME CAMP**

9-12 year olds- Camp is planned for June 24-27 for regular campers. While costs and check-in times have not yet been finalized- we anticipate a mid afternoon camp start time and no increase to the 2020 advertised cost- \$223 (\$125 with local scholarship thanks to Tractor Supply and MKC!)



### **ROOKIE CAMP**

7 and 8 year olds - We have a special opportunity just for you... Rookie Camp! We plan to offer two sessions for this amazing camp again this year!! Session 1 will be June 24 (afternoon) to June 25 (evening) and Session 2 will be June 26 (morning) to June 27 (afternoon). We anticipate costs to not increase from 2020 (\$108 and just \$60 with the local 4-H scholarship).

### **COUNSELORS**

ATTENTION youth 14-18- You may apply to be a counselor at OzSome 4-H Camp! Applications will be available in March. Camp counselor training will be June 23-24 at Rock Springs. The counselor fee will be paid this year by the McPherson County 4-H Development Fund.

## 4-H Club Day

Don't forget to be preparing for our 2021 Club Day! Check out <https://www.mcpherson.k-state.edu/4-h/events/index.html> for a Basics guide and resources for creating presentations (right column of page).

# MULTI COUNTY 4-H

HARVEY | MCPHERSON | MARION

## VIRTUAL CLUB DAYS

HOSTED ON FLIPGRID

---

4-H CLUB DAY IS AN EVENT WHICH GIVES PARTICIPANTS AN OPPORTUNITY TO TELL OTHERS ABOUT THEIR 4-H PROJECTS AND DEMONSTRATE THEIR TALENTS AND ABILITIES. THIS YEAR CLASSES THAT WILL BE JUDGED AND AWARDED RIBBONS ARE: PROJECT TALKS, DEMONSTRATIONS/ILLUSTRATIONS, PERFORMING ARTS, NEW CLASSES: SENIOR INTERVIEW AND 4-H REELS (ALL AGES)


---

SITE OPENS FOR ENTRIES: MARCH 8TH AT 12:01 AM  
SITE CLOSES FOR ENTRIES: MARCH 22ND AT 11:59 PM  
ENTRIES JUDGED: MARCH 23RD THROUGH 31ST.

INTERVIEW EVENT: JUDGED VIA ZOOM ON TUESDAY, MARCH 9TH



**K-STATE**  
Research and Extension



Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact Anne Pitts (316-284-6930).

## Swine & Meat Goat Virtual Kansas Jr Producer Weeks

This year the KSU junior producer days will be hosted virtually as a week-long educational series. A few sessions will be held on weeknight evenings, with the program wrapping up on Saturday morning. These opportunities are free this year, but all youth and adults must register! More information and registration is available at <http://bit.ly/ksujrproducerdays>



Kansas Junior Swine Producer Week  
– February 15-20  
Registration Due – February 8, 2021



Junior Meat Goat Producer Week  
– March 15-20  
Registration Due – March 8, 2021

### Jr. Leaders

If you are a 4-H youth member who is 4-H age 12 and older, join us for a virtual exchange with 4-H youth from Wisconsin. 4-H members from Central Kansas District will also join us in this opportunity.

Youth will have the opportunity to learn more about the state of Wisconsin, the 4-H program in Wisconsin, and how their program compares to Kansas'. Youth will have an opportunity to lead an icebreaker, whole group discussion, breakout room, or a reflection over the six Zoom meetings. Planning will begin at the first meeting.

Meetings will be held every other Thursday at 6 p.m. The dates are:

- February 11 & 25
- March 11 & 25
- April 8 & 22

You do not have to attend all meetings to participate.

**Registration is due Monday, February 1 at 11:59 p.m. To register, go to [https://kstate.qualtrics.com/jfe/form/SV\\_55AmzJGpYyh2i22](https://kstate.qualtrics.com/jfe/form/SV_55AmzJGpYyh2i22)**

## Citizenship In Action

Citizenship in Action will be virtual this year and held February 14 and 15.

Registration is Open and will close on February 1. Cost is \$35 for youth which includes a T-Shirt. Adult leaders can register for free or \$15 for a T-shirt! <https://www.kansas4-h.org/events/index.html>

The 2021 Citizenship in Action event will happen virtually but will still be packed with amazing opportunities. Engage with one of the youngest legislators ever elected to the Kansas Legislature. Learn to Communicate and Deliberate on current topics that are facing our community, country, and world today.

Sessions will be:

Sunday February 14th 1pm – 5:30pm  
Monday February 15th 1pm – 4:30pm

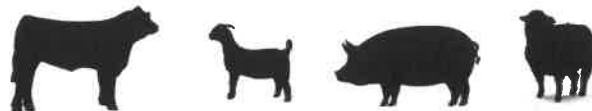
All Youth and Adults should plan to attend the Virtual Citizenship In Action! Youth participants must be 13-18 years old before January 1, 2021. Youth do not have to be 4-H members to attend, invite your friends!

### Tagging and Weigh Days

Plans are being made for Spring tagging. Plan on April 1 for Beef tagging - please make an appointment with Lindsey for what time (8:30-6:30) you will be planning to weigh & tag on the fairgrounds. Watch for more details on Sheep\Goat and Swine tagging which will be the last part of April.

### Livestock Members- YQCA

Please remember that all youth planning to show Beef, Sheep, Swine or Goats at the 4-H Fair must complete the yearly YQCA training. This is also required for State shows. Watch for upcoming in person trainings this spring. There is also the course online as an option.





# Ag News

**Shad Marston**  
**County Extension Agent**

**Agriculture and Natural Resources**



February is here and we finally got some needed moisture here in all parts of McPherson County. Although this winter has been nice to feed livestock, we are all hoping for some moisture. I have seen some field work being done with this warmer than normal weather pattern we have experienced over the last month. While our dry weather pattern has been a plus for livestock producers, it has also had a negative impact on our current wheat conditions and will have to change for some of our wheat acreage to make it till June. I'm sure many farmers are waiting to see what happens in the next few months. Most farmers are exploring alternatives if the wheat does not show promise. Please use your local extension office to gain information on many of the additional practices a farmer can do to help the bottom line.

## Master Gardeners and Friends Upcoming Events

All programs will be virtual Zoom meetings and the Extension office has the link if you're not of the M/G list. Start time will be at 7:00pm with Business meeting to follow. All zoom meeting will be recorded for view at later date.



January 28	House plants	Ariel Whitely-Knoll Shawnee Co Extension Horticulture Specialist
February 25	Beginning Gardening	Tom Buller Douglas County Extension
March 25	Container Gardening	Cassie Homan Post Rock District Horticulture Specialist
April 22	Rain Gardens	Sarah Graber

## What is the White Spot on Egg Yolks?

by Karen Blakeslee



Have you noticed a white spot on fresh egg yolks? That is a germinal disc. It is an indication if the egg is fertile or not.

A non-fertile germ spot will look solid white because it contains the female's cells only. A fertile germ spot will have a somewhat clear center. A rooster must be present with the hens for an egg to be fertilized.

At egg farms where eggs are produced for human consumption, roosters are not present. Therefore the eggs you buy at grocery stores are non-fertile.

For more information, you can go here to learn more. Source: <https://bit.ly/2Kna9rA>

# World of Weeds: Marestalk

Marestalk (*Erigeron canadensis*), known as horseweed to weed scientists, is a troublesome weed in several cropping systems in Kansas and beyond. It is classified in the Aster family, which is a very large group of plants that also includes several marestalk “look-alikes”. Table 1 briefly compares marestalk with one of those look-alikes, dwarf fleabane.

**Table 1. Key features that distinguish marestalk from dwarf fleabane**

	<b>Marestalk</b>	<b>Dwarf fleabane</b>
<b>Distribution</b>	Throughout Great Plains	Eastern and Central Great Plains
<b>Height</b>	Generally 1.5 to 3 feet; up to 6 feet or more	1 foot
<b>Stem</b>	Bristly hairs, unbranched from base through flowers	Hairs pressed upward, branches near base

## Ecology and identification of marestalk

Marestalk is native to North America and grows throughout the Great Plains. It can be found in fields, rangeland, lawns, and other disturbed sites. There is considerable variation in identifying features among marestalk populations, which can make identification troublesome.

Marestalk is an annual plant that typically emerges in late fall or early spring and flowers throughout the summer. Marestalk begins as a rosette, and the stem elongates to about 1.5 to 3 feet prior to flowering, although some plants may reach heights of greater than 6 feet (Figure 1). Stems are covered with coarse hairs. Leaves are oblong in shape with margins that range from entire in the rosette to toothed as the stem elongates. Leaf surfaces range from smooth to covered with coarse hairs and are lighter in color on the lower surface. Leaves are generally crowded together on the stem in an alternate arrangement, but they are less crowded near the top of the stem. Leaves may be attached by a short petiole or may be attached to the stem without a petiole.



**Figure 1. Left to right: Marestalk rosette, plant during stem elongation, marestalk leaf showing toothed margins and bristly hairs, and marestalk inflorescence. Photos by Sarah Lancaster and Dallas Peterson, K-State Research and Extension.**

Marestalk flowers are found in a branched inflorescence at the top of the plant that is said to resemble a mare’s tail (Figure 1). They have white to pinkish ray florets that surround yellow disk florets. Each inflorescence is about ¼ to 1/3 inch in diameter and surround by leaf-like bracts. Each seed is enclosed in an achene, appearing somewhat like a small dandelion seed with white bristles at one end.

Marestalk possesses a strong, pungent smell and may cause skin irritation in humans and livestock. Marestalk is known to be allelopathic, inhibiting the germination and growth of some plant species.

## Management

Marestalk is most problematic in reduced or no-tillage fields. Marestalk populations in Kansas have developed confirmed resistance to glyphosate and ALS-inhibiting herbicides. In addition, application timing is key. Marestalk plants that are approximately 4 inches tall are better controlled by herbicides than either rosettes or 8-inch plants. Some herbicides that effectively control marestalk are listed in Table 2. Be sure to consult herbicide labels for use rates appropriate for your crop and application timing.

**Table 2. Effective herbicides for the control of marestalk.**

<u>Herbicide (Group)</u> <u>emergence</u>	<u>Timing relative to weed</u>	<u>Herbicide (Group)</u> <u>emergence</u>	<u>Timing relative to week</u>
Sonic (2+14)	PRE	Canopy EX (2)	PRE, POST
Fierce XLT (2,14,15)	PRE	Envive (2+14)	PRE, POST
Authority Supreme (14,15)	PRE	Sharpen (14)	PRE, POST
Fierce MTZ, Kyber (5,14,15)	PRE	Acuron (5,15,27)	PRE, POST
Lexar (5,15,27)	PRE	Expert (9,15)	PRE, POST
Trivence (2,5,14)	PRE, POST	2,4-D (4)	POST
		Scorch (4)	POST
		XtendiMax, Clarity (4)	POST

The use of trade names is for clarity to readers and does not imply endorsement of a particular product, nor does exclusion imply non-approval. Always consult the herbicide label for the most current use requirements. For more information on controlling marestalk, please consult the [2021 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland](#), K-State publication SRP-1162.

Here is an article I wrote sometime before and it stills can be very helpful if followed today.

## Preparing for the Calving Season

By Shad Marston, Ag Agent

A lot of us might be starting or preparing to start, for the spring calving season. It's always good to prepare your operation for this exciting time by putting together a plan, checking the forecast each night, along with gathering the supplies and equipment, that will be needed at calving time. Having all the essential items ready, in a "Calving Kit" to grab at any time of the day, can help the cattlemen deliver calves in a timely matter. It's easy to be excited about this time of year, but this can lead to disaster if one's operation is not prepared.

Before the calving season starts, do a "Walk-through of your pens, chutes and calving stalls. Make sure that all are clean, dry, strong, safe and functioning correctly. Lighting can be very helpful in this area. Having to fix, repair or make up a pen at the last minute could cost you precious time when helping cattle calve. Use clean bedding to bed the calving area prior to calving time and maintain this throughout the calving season. It is a lot easier to do this on a sunny day rather than at dark, some night just before you have to get in a cow that is needing assistance.

Develop a plan of what to do, when to do it and who to call for help if there is an abnormal presentation of the calf, along with phone numbers. Make sure all family members or hired hands are familiar with the plan. It may help to write it out and post copies in the right places of the house or barn.

### Calving Plan:

1. Watch closely and be ready to assist on 1<sup>st</sup> calf heifers, one hour after water bag or feet appear.
2. On mature cows, monitor for 30 minutes after water bag or feet appear.
3. Always check presentation of calf if you think there might be a problem by palpating the cow or heifer.

- Who to call:
1. Veterinarian office and cell number
  2. Family members and hired hands cell numbers
  3. Neighbors phone numbers that you can always count on.

A stockman should put together a calving kit that has everything in it that might be needed. The calving kit is effective for making sure you are prepared without the stress of looking for all the items one might need to help pull a calf. Items and equipment for a basic kit are: long plastic gloves, disinfectant, lubricant, obstetrical chains or straps, two O.B. handles, mechanical calf pullers and warm water. Plus, an old plastic cup from the convenience store – use this to dip water from the bucket to clean up the cow. Also have a bottle of iodine solution and string that can be used to treat navels of newborns shortly after birth. This helps protect the calf from outside pathogens by sealing and drying out the umbilical cord. Many different lubricants can be used but one of the best lubricants is probably the simplest: non-detergent soap and warm water. Also, don't forget the simple things like a good flashlight and extra batteries and some old towels or a roll of paper towels. Other items that might be included are a calf feeding tube, notebook and pencil along with calf tags, markers, buttons and a tagger. Don't forget a bristle brush for cleaning up your equipment so everything is ready the next time you need it.

It will be helpful for you to have all these items packed into a 5-gallon bucket or stainless steel pale to make up the "calving kit" so you can grab everything at once. Place this bucket in a location that can be found and reached by everyone in the operation. Even the little ones enjoy running to the house or ranch office to grab the calving kit.

It's best to be prepared for all situations and having everything planned out, and knowing what to do and when to do it helps everyone stay calm in what could be a heated time. Animals know when their handlers are nervous, so staying calm can be very beneficial. There are a wide variety of additional products available to make life easier for cow-calf producers at calving time. Perhaps the best information source regarding what works best for your situation is your local veterinarian. A vet might have a list of additional items to add to your "Calving Kit." Don't put off now what needs to be done before calving season starts. This will help to insure you as cattlemen, to have everything ready and in place when assisting a heifer or cow during the calving process.

# Emergency Measures to Control Wind Erosion

Cropland can be quite susceptible to wind erosion under some conditions, particularly through the winter. Cooler-than-normal temperatures and drought conditions may limit vegetative growth and cover. Burning, tillage, and little crop residue can create a particularly serious hazard. Care should be taken to maintain crop residue through reducing tillage and careful to not remove too much residue through grazing or haying, such as leaving strips unhayed or capturing forage sorghum regrowth to occur.



**Figure 1.**  
Winter wheat stand blown out by wind erosion. Photos by John Holman, K-State Research and Extension.

It is important to monitor field conditions and identify fields that are in a condition to blow. Such conditions include low vegetation cover and a high proportion of erodible-sized clods (less than 1 mm in size, or about the thickness of a dime). It is better to be proactive and treat potential problems before they occur than to try to react and catch up once a field is actively eroding. Once soil movement has started, it is difficult to completely stop further damage. However, prompt action may prevent a small erodible spot from damaging an entire field or adjacent fields.

## Emergency control measures

**Mulching.** If wind erosion has already started, it can be reduced by mulching with manure or other anchored plant materials such as straw or hay. To be effective, at least 1.5 to 2 tons per acre of straw or grass or 3 to 4 tons per acre of corn or sorghum stover are needed to control areas of erosion, and the straw or hay must be anchored. Residue can be spread by hand, spreader or other mechanical equipment.

A stubble puncher or disk set straight may be used to anchor residue and prevent it from being blown away. Wet manure application should be 15 to 20 tons/acre and not incorporated into the soil. Care should be taken to not add wheel paths parallel to the wind direction as the mulch is applied. Traffic areas and wheel paths can contribute to wind erosion.

Generally, mulches are practical only for small areas, so mulching is most effective when applied before the soil starts to move. Producers should scout fields to identify areas that might be susceptible to wind erosion (low vegetation cover and a high proportion of erodible-sized clods less than the thickness of a dime) if they plan to use mulch or manure to controls.

## Emergency tillage

Emergency tillage is a last-resort method that can be effective if done promptly and with the right equipment. The goal of emergency tillage is to make the soil surface rougher by producing resistant clods and surface ridges (Figures 3). A rough surface reduces wind speed. The larger clods and ridges resist movement and provide traps to catch the moving soil particles.

Chisels with single or only a few tool ranks are frequently used to roughen the soil surface. The combination of chisel point size, speed, and depth that produces the roughest surface with the firmest, most resistant clods should be used for emergency tillage.

Research has shown that a narrow chisel (2 inches wide) on 24- to 54-inch spacing, operated 3 to 6 inches deep will usually bring enough resistant clods to the surface to control erosion on fine-textured (clay-based) soils. A medium shovel (4 inches wide) can be effective for medium-textured soils (loamy soils). Spacings should typically be narrower where there is no cover and wider in areas of partial cover, such as a growing crop or plant residue.

If the erosion conditions recur or persist, a second, deeper chiseling should split the first spacing. Tillage passes should be made perpendicular to the direction of the prevailing wind causing the erosion. First tillage passes should be made on the upwind side of blowing soil to stop the advancing front, and slow the time the furrows are filled in with blowing soil (if tillage is done on the downwind side the furrows will fill rapidly).



**Figure 2.** Emergency tillage across 50 percent of the field. Photo courtesy of USDA-ARS Engineering and Wind Erosion Unit, Manhattan, Kansas.



**Figure 3.** Widely spaced shanks used for emergency tillage, making clods to roughen the soil surface. Photo courtesy of University of Nebraska.



If emergency tillage is to be used in growing crops that are covered by crop insurance, producers should check with their crop insurance providers regarding emergency tillage insurance rules. Emergency tillage does not significantly reduce wheat yields of an established crop. Studies in southwest Kansas and Manhattan demonstrate that the use of a chisel on 40-inch spacing reduced wheat yields by 5.5 bushels per acre on the emergency tillage area, due to direct injury caused by the tillage action. Since the entire field is rarely tilled when performing emergency tillage, the overall yield reduction for the field will be less than 5.5 bushels per acre. In fact, yields in the untilled portion of the field actually can be increased by the use of emergency tillage since that tillage will reduce the amount of damage to wheat caused by wind erosion. The overall reduction in yield for fields that have received emergency tillage has been as little as 1 bushel per acre in the studies mentioned above.

Performing emergency, clod-forming tillage across the field is effective in reducing wind erosion. The degree of success of emergency tillage is highly dependent on climatic, soil, and cover condition. It is often not necessary to till the entire field, but rather, it is very effective to perform emergency tillage passes across 50% of the field (till a pass, leave a pass, repeat). Narrow chisel spacing (20 to 24 inches) is best for this method. Emergency tillage is most effective if there is some subsoil moisture and clod formation.

If 50% of the area has been tilled and wind erosion persists, the omitted strips can be emergency-tilled in a second operation to make result in full-cover tillage. If a second tillage pass is needed, it should be at a greater depth than the first pass. Under some conditions 50% of the field may not need to be tilled, but 20-30% tilled might be effective if there is some residue cover and lower potential for erosion. Wide-chisel spacings are used in the full-field coverage method. The space between chisel grooves can be chiseled later should wind erosion persist.

All tillage operations should be perpendicular or across the direction of the prevailing or eroding wind. For most of Kansas, this means that an east-west direction of tillage is likely best.

The best wind erosion control is created with maximum surface roughness when resistant clods cover a major portion of the surface. Research shows that lower travel speeds of 2 to 3 mph generally produce the largest and most resistant clods. However, speeds of 5 to 7 mph produce the greatest roughness. Because clod resistance is usually reduced at higher speeds, the effect may not be as long-lasting as at lower speeds. Thus, higher speeds are recommended where erosion is already in progress, while lower speeds might be a better choice in anticipation of erosion.

Depth of tillage usually affects clod stability more than travel speed, but optimum depth is highly dependent on soil conditions (such as moisture level) and compaction.

Deeper tillage passes can produce more resistant clods than shallow passes.

If the problem is severe and the wheat has already been destroyed or the ground is bare, chisels 4 to 6 inches wide on a 24- to 30-inch spacing will generally provide enough clods to control erosion. Operating depth should be 4 to 6 inches.

### **Controlling wind erosion on sandy soils**

Loose sandy soils require a different tillage approach to effectively control erosion. Clods cannot be formed at the surface that will be sufficiently resistant to erosion on sandy soils. Erosion resistance is achieved through building ridges and furrows in the field to provide adequate protection.

A 14-inch moldboard lister spaced 40 to 50 inches apart (or an 8-inch lister on 20- to 24-inch spacing) is needed to create sufficient surface roughness. The first listing pass should be shallow, not more than about 4 to 5 inches deep. Then, when additional treatment is needed, the depth should become progressively deeper. Alternatively, for the second treatment, the original ridge may be split.

The addition of manure to the ridged surface may also be beneficial in these situations.

### **Tips for effective emergency tillage**

Watch the weather forecast for periods of high winds, particularly when soils are dry.

Assess residue and plant cover prior to the wind blowing, and take preventive action with emergency tillage. It is much easier to prevent the problem from starting than to stop erosion after it begins. If you wait, the soil only gets drier and some moisture is needed to form clods.

Use the combination of tractor speed, tillage depth, and chisel point size that will produce the roughest surface with the most resistant clods. If wind erosion is anticipated, do some test tillage prior to an erosion event to see what tillage tool, depth, and speed will provide adequate clods and surface roughness.

Always start at the upwind location when the field is blowing. A sufficient area upwind of the eroding spot should be tilled, in addition to the area presently blowing.

Till in a direction perpendicular to the prevailing wind direction. For row crop areas it may be necessary to compromise direction and follow the row pattern. Maintain as much anchored stubble in the field as possible.

For more information, see K-State Research and Extension publication MF2206, *Emergency Wind Erosion Control*, at: <http://www.ksre.ksu.edu/bookstore/pubs/MF2206.pdf>



K-State Research & Extension  
McPherson County  
600 West Woodside  
McPherson KS 67460

## RETURN SERVICE REQUESTED

### AGENT CONTACT INFORMATION

**Lindsey M. Mueting**  
County Extension Agent  
4-H Youth Development  
[Lmueting@ksu.edu](mailto:Lmueting@ksu.edu)

**Shad Marston**  
County Extension Agent  
Agriculture and Natural Resources  
[smarston@ksu.edu](mailto:smarston@ksu.edu)  
Radio: Friday, 7:25 a.m.



K-State Research and Extension is an equal opportunity provided and employer. K-State Research and Extension is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision or hearing disability, or a dietary restriction please contact Lindsey Mueting at 620.241.1523.