

Conservation District To Hold Annual Meeting

The 69th Annual Meeting of the Barber County Conservation District will be held January 12, 2019 at the Community Building in Kiowa, KS at 6:00 P.M. Dinner is provided by the banks in Barber County.

The business session will include the district's financial report for 2018 as well as highlights of events and activities throughout the year. There will also be an election of one supervisor to the district board. John Cook holds the expiring position and has agreed to run for an additional three-year term.

Presentation of the Banker's Award Winner will be given to one family for their accomplishments and efforts in performing and maintaining their conservation plan. Two Grasslands Awards will also be presented for improvement to and maintenance of native grassland. The top three conservation poster contest winners in five categories will receive recognition for their posters which will be on display.

Reservations can be made by contacting the conservation office at (620) 886-5311 by January 7, 2019. Hope to see you there!

USD 255 Conservation Field Day

What does 2150 pounds of 5th graders and 2350 pounds of 6th graders equal? One great day of leaving the classroom behind to learn about natural resource conservation.

Yes we actually weighed the kids at the ranch scales where the buffalo are weighed, sorted, tagged, and doctored. Then we bounced across the prairie to see the buffalo and prairie dog town. Eva Yearout held the kids' interest as she shared information about the critters, big and small, that call the Z Bar Ranch their home.

After a sack lunch, the kids learned about wildlife safety with Chris Schrack from Kansas Department of Wildlife, Parks, and Tourism. Effects of rainfall on unprotected soil vs. varying degrees of soil protection was observed at the rainfall simulator demonstration. A pretty savvy bunch gave suggestions on how to protect stream banks and where to build their "farms" as they watched water erosion from the stream bank demonstration eat away at a barn site built along the "creek".

A short nature walk provided some plant and tree identification, then it was off to the races as the kids tried to conserve water while running a relay race. Layers of the soil profile were demonstrated while enjoying soil profile dessert cups before boarding the bus and heading back to civilization.

Education is the most important aspect of what the Barber County Conservation District does, and having the opportunity to share with the South Barber 5th and 6th graders was a wonderful experience. The day just isn't possible without our volunteers: Keith and Eva Yearout, Z Bar Ranch managers; Harold Kline, retired NRCS; Carl Jarboe, NRCS Soil Conservation Technician; Lody Black, NRCS Range Management Specialist.

Special thanks to Cindra Williams, Williams Ag LLC; and Corona Hoch Agency for their generous donations. Your support is ***very much*** appreciated!

Water Availability Before and After Red Cedars: Rancher Observations

Purpose of survey: This survey is part of a study to understand the effects of eastern red cedar encroachment and removal on streamflow and water availability in the Gyp Hills region. The observations and anecdotes of the ranchers, landowners and/or managers of these lands – specifically as red cedar have increased in cover or have been removed by natural (e.g., wild fires) or active management (e.g., prescribed fire, mechanical removal) on the lands they operate – are valuable to developing this understanding. Therefore, your responses to the following questions are sought. Your participation in this survey is strictly voluntary, and, should you choose to participate, you may skip any questions that you prefer not to answer.

It is estimated that this survey will take approximately 15 minutes to complete. *By returning this survey, you will be entered in a drawing for a \$50 Visa gift card.* If you prefer to take the digital version of this survey, you may access it at https://kstate.qualtrics.com/jfe/form/SV_9QTLd5FfTewFfWR or via the QR code included at the end of this survey.

Q1. Have you observed an increase or decrease in red cedar or other woody species cover on any of the land you operate/own? Indicate the magnitude of change on a scale of 1 to 7, with 1 indicating a large *decrease* in woody cover (e.g., densely wooded to mostly open grassland following wild/prescribed fire and/or tree cutting efforts), 4 being no change, and 7 indicating a large *increase* (e.g., mostly open grassland that has transitioned to a densely wooded state).

Circle one:



Q2: Please describe the general geographic area(s) of your observations in Q1 (e.g., Township-Section-Range, location relative to reference point, etc.)

Location: _____

Q3. Please indicate the time period over which you have observed the change described in Q1 (e.g., last 5 years, last 10 years, last 20 years, etc.)

Time period: _____

Q4. Have you observed changes in flow from springs, seeps, or streams within approximately the same geographic area indicated in Q2? Indicate the magnitude of the change on a scale of 1 to 7, with 1 indicating a large *decrease* (e.g., stream that once flowed year round no longer flows except after storm events), 4 being no change, and 7 indicating a large *increase* (e.g., channel that only flowed after storm events now flows year round).

Circle one:



Q5. Please estimate the time period over which you have observed the change described in Q4 (e.g., last 5 years, last 10 years, last 20 years, etc.)

Time period: _____

Q6. Consider grassland and red cedar vegetation communities in the Gyp Hills/Red Hills region. On a scale of 1 to 7, indicate the extent to which you associate any of the following benefits with either of these vegetation systems relative to one another, where 1 indicates grasslands provide this benefit to a much greater extent than cedar woodlands, 4 indicates both provide this benefit to a similar level, and 7 indicates cedar woodlands provide this benefit to a much greater extent than grasslands. If neither provides this benefit, circle N/A.

| Benefit Type | Circle One (1 = grassland much greater; 4 = equal; 7 = cedar woodland much greater) | | | | | | | |
|---|---|---|---|---|---|---|---|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Wildlife habitat | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Beauty, aesthetic appeal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Reduced erosion | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Improved water quality | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Improved water availability | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Grazing potential | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Raw material value (e.g., timber, forage) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Wind break | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Soil Health | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Other ¹ : | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Other ¹ : | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |

¹If there are other benefits you associate with either of these vegetation types, please write in the benefit type in the box next to "Other"

Q7. Consider grassland and red cedar vegetation in the Gyp Hills/Red Hills region. On a scale of 1 to 7, indicate the extent to which you associate the following *disadvantages* with either of these vegetation systems relative to one another, where 1 indicates grasslands are associated with this disadvantage to a much greater extent than cedar woodlands, 4 indicates both are associated with this disadvantage to a similar level, and 7 indicates cedar woodlands are associated with this disadvantage to a much greater extent than grasslands. If neither is associated with this disadvantage, circle N/A.

| Disadvantage Type | Circle One (1 = grassland much greater; 4 = equal; 7 = cedar woodland much greater) | | | | | | | |
|--|--|----------|----------|----------|----------|----------|----------|------------|
| Loss_of wildlife habitat | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Loss of aesthetic appeal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Increased erosion | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Reduced water quality | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Reduced water availability | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Reduced grazing potential | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Reduced raw material value (e.g., timber, forage) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Increased wildfire hazard | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Reduced soil health | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Other ¹ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |
| Other ¹ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |

¹If there are other disadvantages you associate with either of these vegetation types, please write in the benefit type in the box next to "Other"

Q8. Have you participated in or been affected by any of the following controls on red cedar establishment on your land? (select all that apply)

| | |
|---|---|
| <input type="checkbox"/> Prescribed burning (if yes, note frequency of burns _____) <input type="checkbox"/> Mechanical removal of established red cedar trees | <input type="checkbox"/> Wild fires that have killed standing red cedars <input type="checkbox"/> Removal of standing red cedars following wild fire <input type="checkbox"/> Other |
|---|---|

Q9. Consider areas in the Gyp Hills/Red Hills region that are predominantly covered with red cedar woodlands. From your experience and/or observation, what are the major factors that have contributed to red cedar expansion in these areas? Please rank the following factors that you believe apply, with 1 indicating this is a major factor, 2 indicating this is a somewhat important factor, and 3 indicating this factor is of minor/no importance.

| | |
|---|---|
| <input type="checkbox"/> Cedar woodland valued more highly than grassland <input type="checkbox"/> Benefits provided by grasslands are not clear <input type="checkbox"/> Lack of knowledge regarding red cedar control practices | <input type="checkbox"/> Lack of institutional support for grassland management practices (e.g., prescribed burns) <input type="checkbox"/> Cost/effort required to control red cedar expansion <input type="checkbox"/> Other(s) (please indicate) _____ _____ |
|---|---|

Are you a resident or non-resident landowner?

May we contact you with follow up questions via phone call? **Circle one: Yes No**

If yes, please provide a phone number where we may reach you _____

If you have other comments or concerns regarding this project or grassland management in the Red Hills region, please include in the space below or on the back of this sheet, or contact the research team directly at the email tlcmoore@ksu.edu. Should you decide that you no longer wish for your responses to this questionnaire to be used as part of this study, please contact the research team at the email tlcmoore@ksu.edu and we will honor your request.

To submit your responses via the online version of this survey, visit https://kstate.qualtrics.com/jfe/form/SV_9QTLd5FfTewFfWR or use the QR code to the right. All responses (paper and online) will be entered in a drawing for a \$50 Visa gift card



NRCS Sets Program Funding Application Cutoff for December 21

Salina, Kansas November 15, 2018—Farmers and ranchers will want to plan ahead and sign up early for USDA conservation funding. Karen A. Woodrich, USDA Natural Resources Conservation Service (NRCS) State Conservationist in Kansas, announced farmers and ranchers interested in the Environmental Quality Incentives Program (EQIP) need to apply by December 21, 2018 for funding in 2019. Applications are being taken at all USDA Service Centers in Kansas.

NRCS provides funding and technical assistance to help farmers and ranchers implement conservation practices that provide environmental benefits to help sustain agricultural operations. Conservation program participation is voluntary and helps private landowners and operators defray the costs of installing conservation practices.

NRCS accepts conservation program applications year-round; however, applications for 2019 funding consideration must be submitted by December 21, 2018. Applications made after the December 21 cutoff will be considered in the next funding cycle. Additional information is available on the Kansas NRCS website at www.ks.nrcs.usda.gov under the Programs tab, or you can contact your local NRCS service center. USDA is an equal opportunity provider, employer, and lender.

Winter Grazing

By Lody Black, NRCS Range Management Specialist

The weather is starting to get cold and that means winter is here. With some of these late rains that have been received and the grass really taking off late in the growing season, some people may be thinking about leaving the cattle or other livestock on the range for the winter or maybe winter grazing is the normal rotation. Winter grazing can extend the grazing season and be less stressful for individuals not having to move livestock into pens where they must be fed all winter, but also can be very time consuming when it comes to care of the animals. Winter grazing can also be harmful to the overall health of the grass, if not done correctly.

As everyone knows with winter comes frozen stock tanks, animal sickness and supplemental feeding, just to name a few of the daily tasks or concerns when it comes to care for the livestock, which can be hard if they are miles away in the pastures. Being able to monitor your grass consumption can also become difficult when the area isn't visited as much as it can be in the summer, the grass can really change and become overgrazed in a matter of a few days in the winter months.

Another thing to keep in mind, especially in a rotational system or one in which the pastures that are currently being grazed, will be grazed again in the growing season, is that enough forage needs to be left in reserve so that the desirable species have enough to get off to a good start in the spring. Making sure the same field isn't used each year for winter grazing will help eliminate overgrazing in that pasture. While supplemental feeding is almost a must in a winter grazing situation, moving the feed or mineral or whatever is being fed is necessary so one area does not get severely overgrazed and become full of undesirable, ungrazeable species.

If you have any other questions or would like to talk about a grazing system, feel free to give us a call here at the office (620)-886-5311 ext. 3 or ext. 3047 for Lody.

DATES TO REMEMBER

December 25, 2018 Christmas Day.....Office Closed
January 1, 2019 New Year's Day.....Office Closed
January 12, 2019 Annual Meeting
January 21, 2019 Martin Luther King, Jr's Birthday.....Office Closed
February 18, 2019 President's Day.....Office Closed

Heavy and Copious Amounts of Rain and Erosion. By Carl Jarboe, Soil Conservation Technician

Does this sound like your area this past late summer and fall?

As I have driven around the county I've seen lots of erosion from the several rain events we have had this year. Terraces over topped with big cuts going down the hill as the terraces fail in domino fashion is unfortunately a common site this fall.

I have observed some terraces that were worked on 3 times this year. After each rain event they topped and made large cuts across the fields. Operator fixed the low spots, next rain topped in another spot, and so on.

We design terraces to have the capacity to handle a 10-year rain event over 24 hours. Our design programs allow for 4.62 inches of rain in a 24-hour period. I guess that tells you that 6 inches in a few hours are going to cause issues.

We know that designing terraces for rain events like we have experienced in the last year is not realistic and certainly they would not be farmable. A cover to slow the water down and reduce the amount of erosion is our next protective practice.

I'm sure you also noticed that fields with some cover being wheat that is already up or residue from the previous crop had less erosion in most cases. Anytime you have cover of any type protecting the soil you slow down the water as it tries to go downhill. Slowing up the water reduces the velocity which in turn lessens the erosive power of the water as it travels across land.

This brings us to a soil health lesson. Two very important aspects deserve some attention. Cover, green vegetation or weed, and or crop residue lessen the effects of heavy rain two ways. First, they lessen the effect of rain drops hitting the ground. The raindrop can compact that top layer of soil. reducing infiltration and increasing runoff rates. Secondly the water is kept on the field a little longer because we reduced velocity. This means more opportunity to soak in allowing more moisture into the soil profile.

Heavily worked soil will shed water. The rain instantly starts running when it hits the ground with little time to soak in. Often after a rain event you can go to a worked field and dig down to find it dry 6" down with little infiltration where on the same soils with a cover of some sort you will find deeper infiltration of the rain water. Constantly tilled or worked soil has less pore space allowing for infiltration than minimum or no-till soils of the same type.

Where do you go from here?

Terraces fail due to several different issues. Excessive rain, (we all can relate to that after this year) reduced terrace height due to farming activity, channels filled with sediment reducing capacity, and or poor outlets are the usual causes. Outlets may be creating cuts in a neighboring field with the head cut backing into the terrace channel or maybe the waterway that is supposed to be the outlet is full of sediment and the water can no longer get into it causing a ditch alongside the waterway.

If you see your fields suffering from erosion issues maybe a field visit from our office staff could help determine a good fix instead of a band aid. Terraces systems can be re-built including re-building the waterway or changing the outlet. Projects like these may fit EQIP (Environmental Quality Incentive Program) and qualify for cost share. If you use cost share or are just wanting to do the work on your own, we can help with design and technical help.

Call or stop by our office before December 21st if you are interested in the EQIP program as the 21st is the last day to sign up for the 2019 fiscal year.