

SUMMER

Volume 34, Issue 3

Inside This Issue:

Page 2: Water, Water Everywhere

Page 3: Monitoring Grass Consumption



The 2021 KS Range School Is 4 Weeks Away!

It is time to start thinking about attending this year and then register to attend!

Learn more about rangeland management in a friendly setting with other ranchers, land managers, range management students and natural resource professionals.

You can register at KGLC.org for the schools which cost \$350 per student which covers room, board and tuition for the 2 1/2 day schools. Scholarships of \$175 are available for most ranchers and eligible college students while scholarships of \$125 are available for most natural resource agency personnel.

The **Mixed Grass School** is scheduled for August 10-12 at Ringneck Ranch near Tipton, KS, for directions, Google "Ringneck Ranch Pheasant Hunting".

The **Tallgrass School** is scheduled for August 24-26 at Camp Wood YMCA near Elmdale, KS.

The new **Shortgrass School** is set for September 7-9 at Camp Lakeside at Scott Lake.

The theme for all three schools this year is "**Ranching to Regenerate Rangeland**".

There will be rancher and expert panels that will talk about how to make your rangeland the best it can be so you can plan long-term for your ranch's native grasslands to be your greatest ranching asset.

Besides learning plant identification, figuring stocking rates, monitoring vegetation response, estimating forage allocation and the rest of basics needed to manage your rangeland, there will be ranchers and natural resource professionals from NRCS and other organizations talking with you about how to plan long term for whatever nature or market forces bring to your ranching enterprise and how to respond to keep your rangeland health high and your livestock productive.

We will have the final course agendas up on our website by mid-May at the latest!

Learn more at our website, KGLC.org or email [barth.crouch@gmail.com](mailto:barth.crouch@gmail.com) or call 785-452-0780 **but please register before July 28th.**

**Make this the year you attend the Kansas Range School near you...and bring your neighbors along!**

Board of Supervisors  
Ted Alexander—Chairman  
Ann Cargill—Vice Chair  
Calvin Boyd—Treasurer  
Matt Cantrell—Member  
John Cook—Member

Dates to Remember:

July 5 Independence Day Observed (Office Closed)

July 22-25 Barber County Fair

August 28 Registration due for Range Schools

September 6 Labor Day (Office Closed)

Conservation Office Staff  
Blake McLemore— Acting District Conservationist  
Ronnie Landwehr—Soil Conservation Technician  
Josh Brown—Soil Conservationist  
Cheryl Davis—District Mgr.  
Brean Moody—District Clerk

**Barber County Conservation District is offering a scholarship for a Barber County rancher, land manager, or range management student to attend the 2021 Mixed or Shortgrass School. Please contact the Conservation Office at 620-886-5311 by July 26 to apply for this scholarship. Registration is due to KGLC by July 28.**

# Water, Water Everywhere (Except In The Pond That Lost Its Dam)

By Carl Jarboe, NRCS Soil Conservation Technician

Dam failures can be caused by many different factors. Dam maintenance is the best way to prevent an issue. I have seen several dams that washed out this spring thanks to the many rain events we had in the area. Several could have been prevented with good maintenance or good repairs.

Pond dams in Barber county often seep water. The soils we have are just not the best for compacting and sealing off water. Another issue is the red rock and layers of shale we have. When a dam is built it needs a core trench that basically is a cut off trench for water moving underneath the dam. If a dam is built on top of an impervious layer it will seep and most likely will fail at some point. The water under the dam will saturate the soil within the dam itself which will likely lead to sloughing of the soil. When it starts to move it may very well blow out and create a hole in the dam.

Trees growing on a dam can also cause failures. Trees on the back side are particularly an issue. As the trees grow and their roots penetrate the dam growing towards the moisture on the other side. Should the tree die the roots rot out and the remaining cavity acts like a conduit for water to leak through the dam. As the water starts moving through the dam it saturates the interior and becomes erosive resulting in a total failure of the dam. Trees on the face or water side of the dam can also cause issues and need removed as well.

When dams do not have a principal spillway pipe the only way excess water can be released is through an auxiliary spillway. This is a vegetated area that is usually at least 3 feet lower than the top of the dam. The auxiliary spillway is designed with a 25ft area of flat ground that helps slow the water down, and a slope going from there downstream that is vegetated as well. They are also designed at a width that can handle the amount of water expected in a big rain event. It is not designed for continuous flow and should be used every few years not several times in one year. Constant flow can cause issues. Keeping good vegetation can be difficult. Without good cover we would expect erosion of the auxiliary spillway which can lead to dam failure as well. The size and grade of the auxiliary spillway is a very important part of the dam design.

Maintaining the principle spillway pipe is very important. Keep debris away from the inlet. Keep rodents out of the area as well.

When repairing a washed-out portion of a dam, just filling the hole with soil and adding a pipe may not really fix the issue. There are some steps you should take to help the repair stick. V out the area of the dam that failed. This will help the contractor get good material packed back in the area. Pack with rubber tire machines not track loaders. Tracked machines just can't pack soil effectively. Using good material (not just any old soil) will work well. Many of our soils may pack down but the soil particles do not stick together resulting in seepage and piping through the dam. We can run a soils report for the area of your pond dam and help you identify soils that would be better to use for a repair than others.

We all love having a pond on our property. Keeping it there and in good shape takes some effort. Keep the principal spillway pipe free of debris. Remove trees on the dam that can result in issues down the road and maintain the auxiliary spillway. Stop trailing of livestock through it and keep good vegetation on it so when it is needed it functions properly.

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***We have a new shipment of HDPE Pipe—including large diameter.  
Come see us for addressing those erosion issues!***

## Monitoring Grass Consumption - Lody Black, Rangeland Management Specialist

In this article I wanted to take the opportunity to discuss one of the quickest and most simple ways to monitor the consumption of your grass during the growing season, so adjustments can be made in a reasonable and timely manner. Those adjustments can be both positive and negative depending on the year, as we try to achieve the general goal of take half, leave half. The two main tools required for doing quick checks of grass consumption are the grazing exclusion cages and a grazing stick (or a yard stick would work).

A grazing exclusion cage typically consists of a cattle panel bent in a circular shape around 2 t-posts in the ground. This should be placed on an average grazed site, so we would want to avoid on tops of hills and down in the bottoms of canyons. The species that is most dominant within this cage is important too! A lot of times we suggest choosing Sideoats grama, or Little Bluestem, as both plants are readily grazed by livestock but aren't what we consider the "Ice cream" plants, like Big Bluestem, Indiangrass or Switchgrass.

The grazing sticks are usually about 36 inches tall, or just a wooden yard stick would work as well. This would be used to measure the height of the grass inside the exclusion cage and then also outside the cage. The key to this is to choose a spot outside of the cage within 10 or 20 feet, but also a spot where the cattle have moderately grazed. If a spot like this isn't chosen it will skew the results one way or the other.

The biggest component to this is thinking about where we are in the growing season. If we measure in the end of June, where we are barely over half of the growing season and there is 18 inches of growth on Sideoats grama inside the cage, but outside of the cage we only have 4 inches then, it would maybe be a good idea to start pulling a few head out to try to even out our 50% utilization. On the flip side of the coin, if we have 18 inches both inside and outside of the cage, we could maybe dump a few more head into the pasture to try to get to that 50% again.

This is strictly going off a season long grazing system and a take half, leave half scenario, so this would change depending on management goals of the rangeland. This technique can be used in those situations as well if the numbers are just changed to fit the goal. I would be more than happy to talk to anyone interested in setting this up, that doesn't already have it, or maybe even learning more about different monitoring techniques, or having me come take a look at the grass several times during or after grazing events to give an idea of where we were at for the year. Just call us at the conservation office and ask for Lody.



Figure 1. The above image is an example of a grazing exclusion cage. This would be much bigger than necessary but would be a similar set up.

### **Monitoring Technique Purposes:**

**Grazing Exclusion Areas (Cages)** - measure the degree of use of the key forage species during the grazing season. Exlosures separate herbage loss due to grazing pressure from loss due to natural weathering and wildlife. **Goal** - Remove no more than 50% by weight of the current year's growth of the designated key forage species during the growing season and no more than 65% by weight of the total current year's growth during the dormant season unless specific objectives stated above determine a different degree of use.

Figure 2. The above clip is directly from our grazing plans we write. We typically clip and weigh at the end of a grazing season to figure the 50% by weight but height is a good quick estimate as well.