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Conservation District meetings are held the first Tuesday of each month, 5:30 p.m. in the Conference Room of the USDA Building. You are welcome to attend. Call 406-232-7905 to verify time and date.

Conservation District Supervisors are:
- Walter Rolf, Chairman
- Ron Watts
- Charley Bumgardner
- Ed Beyl
- Ty Jones
- Mike Toennis
- Carol Watts, Administrator and Editor

Field Office Staff:
- District Conservationist: vacant
- Shanna Talcott, supervisory DC
- Kathy Meidinger from Prairie County NRCS office assisting

Turn to stock density, a powerful grazing tool
An article taken from Western Farmer Stockman

Written by Robert Waggener
Photo credits by Robert Waggener

Pasture profits
Wyoming rancher Sage Askin runs his entire livestock operation on leased lands so he works hard to ensure rangelands and pastures remain healthy and vibrant. The end results for him and his family are greater profits and sustainability.

When it comes to forage management, ranchers are finding that high-density, short-duration grazing combined with ample recovery time can boost forage resources. In fact, for Sage and Faith Askin, Wyoming livestock producers who run rangelands and pastures they lease, the practice has meant a dramatic boost to forage resources.

“The power of density is the craziest thing,” Sage Askin says. “We have sites where we’ve bedded 1,500 ewes weighing 120 pounds in a half-acre or less. We continue to use bigger and bigger herds of cattle to get the density up, including up to 1,340 yearlings in grazing paddocks as small as 35 acres.”

Livestock are moved regularly to ensure plenty of forage is left behind, and that grasses and forbs can fully recover before being grazed again.

Among the many benefits, Askin says, is the fact that manure and urine are distributed across the entire pasture, and the manure is quickly broken down by constant hoof activity — meaning nutrients are getting into the soil vs. cow patties drying out and staying on top of the surface. This free fertilizer is among the many reasons why the Askins are seeing a boost in forage.

“These sites have more organic matter in the soil, and they are developing more plants that are lush, green and higher in energy,” Askin claims. “Stock density is a very powerful tool that can multiply the effect of each of the other grazing tools. If we change up the timing of use, it’s a good thing. If we do it with added density, it compounds any changes faster.”

A plan for grazing management

Tom Ford, who works on a 73,000-acre Wyoming ranch that is taking many steps to improve grazing management, says he and brothers Kellen and Cameron Smith — who co-manage the ranch — are looking at everything big and small to bolster forage resources.

For example, Ford says, one 100-acre dryland pasture was hayed for many years. Starting in 2017, they began intensively grazing the pasture for a short period, leaving at least 30% standing residual behind.

Urine and manure were evenly distributed across the pasture, and the high number of animals trampled the manure, Ford says. He adds that the standing residual is catching more moisture than when the pasture was hayed.

“There are now more nutrients and water going into the soil; and in only three years, we are definitely seeing an increase in forage on that 100 acres,” he says. “It was previously worth haying that pasture in most years, but we’re seeing even bigger financial benefits now.”

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The Conservation District sells weed, grass and flower identification books, survey flags, land ownership maps and map booklets, tree tubes and shades, fabric, fabric mats, staples, wildlife escape ramps and rain gauges.

FOR SALE

We also have an electronic livestock scale to rent. One dollar each for the first 50 head and then 50 cents per animal after that. Minimum charge is $10.00. The scale is not licensed.

For RENT Now

Tree shear and grapple fork for tree removal up to 14" in diameter. Call the CCCD office for more information. 406-232-7905 ext. 3242

Science Fair Helpers: Serving as judges for the Rural Science Fair held February 5, 2020 and hosted by the Sacred Heart School were Brian Kloster and Maryjo Kimble, Soil Survey; Martin Ellenburg and Mark Henning, NRCS Area office and Kathy Meidinger, NRCS Soil Conservation Tech for the Terry and the Miles City Field offices. Shown at right is Mark Henning, NRCS Agronomist reviewing a project with a student. The event is an opportunity for students 5th through 8th grades to learn more about science and the judges were glad to be a part of it.

Other News: Katelynn Hess, Field Office Soil Conservationist has left her position with NRCS to pursue a career with the Farm Service Agency in Billings, MT. We wish Katelynn much success.

Personnel: A note from Shanna Talcott:

Greetings Custer County producers, I became Supervisory District Conservationist for the Broadus/Miles City/Terry Work Unit in 2019. My husband, Chase, and I both grew up in the Broadus area and are raising our children, Scarlett and Porter, on Chase’s family ranch near Broadus. My career with NRCS began almost 20 years ago as a student intern and has led me to places like Plentywood, Dillon, White Sulphur Springs, Joliet, and Miles City. As a Work Unit, we function as a team and help each other and assist customers across county boundaries. I lay claim to having the best staff and Work Unit team and am constantly impressed with their experience, work ethic, and ability to get the job done every time. From L to R in Broadus, Elizabeth Emeline (Partner Biologist with American Bird Conservancy), Corey Swenson and Libby Olson (Range Conservationists), and Shanna Talcott. At right, Kathy Meidinger (Soil Conservation Technician Terry).

Have you met Ed Bahm? Although many producers never see him, he is an important part of the government programs.

Hello, I am Edward Bahm. I grew up on the family ranch about 60 miles south and west of Bismarck, North Dakota. I enjoy helping my folks on the family ranch whenever I get an opportunity. I have worked for NRCS 14 years. I have been a NRCS program specialist for the Miles City Area of Montana since April of 2019. Which is roughly the eastern ¼ of Montana. I help staff within local county field offices such as Miles City with NRCS program related tasks. Some examples of how I may help local staff, I might help process a modification to contract to adjust a well that was deeper than expected, I might help transfer a contract from one operator to another, or I may help offices meet contracting deadlines for approving program contracts.

The Yellowstone River Conservation District Council remains committed to providing leadership, assistance and guidance for the wise use and conservation of the Yellowstone River resources.

Our Irrigation Water Management & Efficiency (IWM) working group has nearly completed two major irrigation districts (I.D.) system assessments located in Custer & Rosebud Counties. We will be meeting with I.D. stakeholders and potential project funders in early March. It is our goal to assist I.D.’s with professional technical services that will provide project planning and design recommendations for irrigators to improve efficiency with their conveyance systems.

The Council under the leadership of Coordinator Dan Rostad and Conservation Associate Aaron Kolb, along with Chairman Don Youngbauer have coordinated efforts with David Pratt IWM work group Chairman and others to conduct inventories, determine projects and search for funding. For more information contact Dan Rostad YRCDC Coordinator at 406–930-0594 or email Dan at yellowrockriver@gmail.com
FIELD SCHOOL: Ranchers got a solid education in managing rangelands and pastures at one of Jim Gerrish's Management-intensive Grazing schools recently. Gerrish and his co-instructors teach a class on estimating the amount of forage that is in a grazing paddock, and then how to use that information to determine the forage use target combined with the grazing period.

Ford, the Smith brothers and the Askins all believe in continuing education. They all talked about how the Ranching for Profit School, led by Dave Pratt and others, and the Management-intensive Grazing School, led by Jim Gerrish, help them to become more profitable and sustainable.

“If things are working for someone else, you don’t have to reinvent the wheel,” Kellen Smith says. "I was kind of getting stuck in the past, but I am learning that if you open your eyes and mind, there are better and more effective ways to make a profit."

Cameron Smith adds: “Schools like Ranching for Profit and MiG are completely opening our eyes to different thought processes, different ways to do it better.”

During the four-day MiG school in Wyoming last year, Gerrish continually questioned the students and challenged them to think outside of the box — whether it had to do with big things like stock density and the time and timing of grazing, or small things like effectively managing manure and urine to build profits the inexpensive way.

“When was the last time you thought about what comes out of the back end of your animals?” Gerrish asked. “How is that manure distributed? Are those piles just sitting on the ground not doing anything because of low stocking rates, or are the piles being quickly broken down, with the nutrients cycling back into the soil? Answers to questions like that are driven directly by your day-to-day management decisions.”

**Put more energy into your soil**

Grazing expert Gerrish urges ranchers to focus more energy on learning about soil and how to improve it through carefully managed grazing.

Among the many ways to improve the soil is to keep the ground covered with actively growing plants during spring, summer and fall, and ample residue during winter. For example, when the ground is covered in the heat of summer, the soil remains cooler, resulting in less evaporative water loss and a moderation of many biological processes.

“The loss of nitrogen from the soil accelerates as soil temperatures rise, and N fixation by legumes decreases,” he says. “When soil temperatures get above about 80 degrees [F], a lot of less desirable biological processes accelerate, while desirable processes slow.”

Gerrish adds that the ability of soil to recover from drought, floods and many other weather-related events improves if there is more living material on the surface during the growing season. This means managing grazing carefully to ensure a healthy mix of cool- and warm-season grasses along with legumes. It’s also important to move livestock while plenty of vegetation remains, and give pastures adequate time to recover.

**Additional reading**

Among the resources focusing on soil management and other aspects important to boosting forage resources on rangelands and pastures are the following four books:

- “Dirt to Soil: One Family’s Journey into Regenerative Agriculture,” by Gabe Brown
- “The Drought Resilient Farm,” by Dale Strickler
- Kick the Hay Habit: A Practical Guide to Year-Round Grazing,” by Gerrish
The 2020 Soil Health Symposium, held in Billings this February, was a wealth of information. Hearing from several speakers, including Dr. David Montgomery, Gabe Brown and several other Montana farmers and ranchers reinforced the need for healthy, sustainable soil. The soil is a living ecosystem, packed with billions of bacteria, fungi and other microbes. This below-ground ecosystem must be managed to stay healthy, just as we manage our above-ground ecosystem. Healthy soil leads to clean air and water and productive lands by regulating water, sustaining life, buffering pollutants, cycling nutrients and providing structure for plant roots. Fully functional soil maximizes output while minimizing costs. It allows us to better withstand extreme weather events, drought and pest pressures.

In order to keep our soils healthy, we must keep the five basic soil health principles in mind:

1) Armor the soil – every bit of residue that we can maintain on the soil surface prevents this critical resource from being washed or blown away. In addition to cover, the residue layer also provides habitat and food for those organisms that spend part of their lives above ground.

2) Minimize disturbance – reduce tillage, decrease chemical applications and decrease overgrazing. Every time we disturb the soil, we reduce its functionality by diminishing the habitat that microbes need to survive.

3) Increase diversity – just as we’d tire easily of doughnuts for every meal, the below ground microbial population thrives with more diversity.

4) Continual living root – a living root for the longest time each year provides food for those microbes, and the area directly around the root is where the soil ecosystem is the most active.

5) Integrate livestock – not only do the livestock harvest crop aftermath and native plants, but they contribute a huge boost to the microbial population via saliva, urine and dung.

Intentionally integrating these five principles will improve the health, functionality and sustainability of your soil. Reported by Kathy Meidinger, Prairie County NRCS office.

Pollinator Workshop: On February 26, 2020 CCCD hosted a workshop on the Lake County Pollinator Initiative. Twelve people were in attendance and listened to a very informative message on Pollinator Garden Planting given by Heidi Fleury, Lake County District Administrator. There were handouts on identifying bees and wildflowers, suggestions on how to get started, how to monitor and how to get the word out about pollinators. Watch for more information in future newsletters.

TREE ORDERS: March 25, 2020 is the deadline for placing tree orders. If you are interested in planting trees this spring and want to purchase trees from the District, please contact Carol NOW. 406-232-7905 extension 3242 or email Carol.watts@mt.nacdnet.net. Thanks!
9 Things That May Disappear In Our Lifetime

Interesting to note and very true too.....Whether these changes are good or bad depends in part on how we adapt to them. But, ready or not, here they come ......

1. The Post Office

Get ready to imagine a world without the post office. They are so deeply in financial trouble that there is probably no way to sustain it long term. Email, Fed Ex, and UPS have just about wiped out the minimum revenue needed to keep the post office alive. Most of your mail every day is junk mail and bills.

2. The Check

Britain is already laying the groundwork to do away with cheque by 2018. It costs the financial system billions of dollars a year to process cheques. Plastic cards and online transactions will lead to the eventual demise of the cheque. This plays right into the death of the post office. If you never paid your bills by mail and never received them by mail, the post office would absolutely go out of business.

3. The Newspaper

The younger generation simply doesn't read the newspaper. They certainly don't subscribe to a daily delivered print edition. That may go the way of the milkman and the laundry man. As for reading the paper online, get ready to pay for it. The rise in mobile Internet devices and e-readers has caused all the newspaper and magazine publishers to form an alliance. They have met with Apple, Amazon, and the major cell phone companies to develop a model for paid subscription services.

4. The Book

You say you will never give up the physical book that you hold in your hand and turn the literal pages. I said the same thing about downloading music from iTunes. I wanted my hard copy CD. But I quickly changed my mind when I discovered that I could get albums for half the price without ever leaving home to get the latest music. The same thing will happen with books. You can browse a bookstore online and even read a preview chapter before you buy. And the price is less than half that of a real book. And think of the convenience! Once you start flicking your fingers on the screen instead of the book, you find that you are lost in the story, can't wait to see what happens next, and you forget that you're holding a gadget instead of a book.

5. The Land Line Telephone

Unless you have a large family and make a lot of local calls, you don't need it anymore. Most people keep it simply because they've always had it. But you are paying double charges for that extra service. All the cell phone companies will let you call customers using the same cell provider for no charge against your minutes.

6. Music

This is one of the saddest parts of the change story. The music industry is dying a slow death. Not just because of illegal downloading. It's the lack of innovative new music being given a chance to get to the people who would like to hear it. Greed and corruption is the problem. Artists and record labels and radio conglomerates are all self-destructing. Over 40% of the music purchased today is "catalogue items," meaning traditional music that the public is familiar with. Older established artists. This is also true on the live concert circuit. To explore this fascinating and disturbing topic further, check out the book, "Appetite for Self-Destruction" by Steve Knopper, and the video documentary, "Before the Music Dies."

7. Television

Revenues to the networks are down dramatically. Not just because of the economy. People are watching TV and movies streamed from their computers. And they're playing games and doing lots of other things that take up the time that used to be spent watching TV. Prime time shows have degenerated down to lower than the lowest common denominator. Cable rates are skyrocketing and commercials run about every 4 minutes and 30 seconds. I say good riddance to most of it. It's time for the cable companies to be put out of our misery. Let the people choose what they want to watch online and through Netflix.

8. The "Things" That You Own

Many of the very possessions that we used to own are still in our lives, but we may not actually own them in the future. They may simply reside in "the cloud." Today your computer has a hard drive and you store your pictures, music, movies, and documents. Your software is on a CD or DVD, and you can always re-install it if need be. But all of that is changing. Apple, Microsoft, and Google are all finishing up their latest "cloud services." That means that when you turn on a computer, the Internet will be built into the operating system. So, Windows, Google, and the Mac OS will be tied straight into the Internet. If you click an icon, it will open something in the Internet cloud. If you save something, it will be saved to the cloud. And you may pay a monthly subscription fee to the cloud provider. In this virtual world, you can access your music or your books, or your whatever from any laptop or handheld device. That's the good news. But, will you actually own any of this "stuff" or will it all be able to disappear at any moment in a big "Poof?" Will most of the things in our lives be disposable and whimsical? It makes you want to run to the closet and pull out that photo album, grab a book from the shelf, or open up a CD case and pull out the insert.

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**Carol’s Corner**

Helpful Hints and Recipes:

**Tried and True!**

**Springtime Cake**

Blueberry Citrus Cake transform a cake mix by adding these items.

- 1 pkg. 2-layer lemon cake mix
- 1/2 cup orange juice
- 1/2 cup water
- 1/3 cup cooking oil, 3 eggs
- 1 1/2 cups fresh or frozen blueberries, 1 tbsp. finely shredded orange peel, 1 tbsp. finely shredded lemon peel.

1 recipe citrus frosting (see below)

**Preheat** oven to 350. Grease and lightly flour two round baking pans, 8x1 1/2 inch or 9x1 1/2 inch set aside.

In a large mixing bowl combine cake mix, orange juice, water, oil, and eggs. **Beat** with an electric mixer on low speed for 30 seconds. Increase speed to medium beat for 2 minutes. With a wooden spoon, fold in blueberries, orange peel and lemon peel. **Pour** batter into pans.

**Bake** 35 to 40 minutes until a wooden pick inserted near the center comes out clean. **Cool** layers in pans on wire racks for 10 minutes. **Remove** cakes from pans. **Cool** completely on the wire racks. Frost with citrus frosting.

**Citrus frosting:**

In a medium bowl beat together one 3 oz pkg. cream cheese softened and 1 1/4 cup butter softened until fluffy. Add 3 cups of powdered sugar and two tbsp. orange juice and beat until combined. In a small bowl whipl 1 cup whipping cream to soft peaks, add to cream cheese mixture. Add the lemon and orange peel. Beat on low speed until combined.

**Enjoy**, this cake never fails to please.
Thoughts on life:
You have only failed when you fail to try.
Money is the root of all evil and every woman needs roots.
Children are like sponges, they absorb all our strength and leave us limp. But give them a squeeze and we get it all back.
You can't help a man uphill without getting closer to the top yourself.
When you are blue, be a bright blue.
By the time you can afford greener pastures, you are too old to climb the fences.
The cards you hold in the game of life have little meaning if they are never played.
A committee is usually a group of the unprepared appointed by the unwilling to do the unnecessary.
Life by the yard is hard - Life by the inch is a cinch.
To err is human, to really foul things up requires a computer.
Those who indulge BULGE.
It's better to move and stumble than to sit still and mumble.
If you don't have wrinkles, you haven't laughed enough.
Frogs have no problems, they just eat what bugs them.
A smile increases your face value.
I’m just catching up with yesterday, by tomorrow I should be ready for today.
Patience is a virtue that carries a lot of WAIT.
The faith to move mountains is the reward to those who have moved little hills.

Continued from page 5. Things that may disappear in our lifetime......
> 9. Privacy
> If there ever was a concept that we can look back on nostalgically, it would be privacy. That's gone. It's been gone for a long time anyway. There are cameras on the street, in most of the buildings, and even built into your computer and cell phone. But you can be sure that 24/7, "They" know who you are and where you are, right down to the GPS coordinates, and > the Google Street View. If you buy something, your habit is put into a zillion profiles, and your ads will change to reflect those habits. "They" will try to get you to buy something else. Again and again.
> 10. All we will have left that can't be changed are "Memories"
> And then possibly Alzheimer's will take that away from you too !

**HAPPY IRISH BLESSING**

*An Old Short Irish Blessing*

May love and laughter light your days,
And warm your heart and home,
May good and faithful friends be yours,
Wherever you may roam.
May peace and plenty bless your world,
With joy that long endures.

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**Amusing thoughts:**

- Is there ever a day a mattress is not on sale?
- Frog parking only—others will be toad.
- If your car is running, I will vote for it.
- I want to grow my own food but I can't find bacon seeds.
- What happens if you get scared to death twice?
- This is my step ladder—I never knew my real ladder.
- My wife says I never listen to her, or something like that.
- I checked into the hokey pokey clinic and turned myself around.
- Stealing someone’s coffee is called mugging.
- Pasteurize: too far to see.
- Whoever invented “knock knock” jokes should get a No-Bell prize.
- The other day I held the door open for a clown, it was a nice jester.
- No matter how much you push the envelope, it will still be stationery.
- Energizer Bunny arrested: charged with battery.
- I put my grandma on speed dial, I call that Insta Gram.

**A 310 Permit is Required:** If you are planning any project including the construction of new facilities or the modification, operation, and maintenance of an existing facility that may affect the natural existing shape and form of any stream, its banks or its tributaries you must apply for a permit. Any private entity or non-governmental individual that proposes to work in or near a stream on public or private land must obtain a 310 permit prior to any activity in or near a perennially flowing stream. Call 232-7905 extension 3242 for more information.
Words Related to Soils and Earth

ALLUVIUM BARE BARREN COMPOST CLAY CONTAMINATED
CLOD COMPOST CONTAMINATED CLOTH DUST CONTAMINATED
DIRT DUST CONTAMINATED
FERTILE DUST GROUND
GUMBO GROUND
LOAM HUMUS
QUICKSAND PEAT
SLUDGE SAND
STERILE SOIL
TURF TOPSOIL