Mid-Missouri River Prescribed Burn Association *News*

PRESCRIBED BURN
MID-MISSOURI RIVER
ASSOCIATION

LYMAN•BRULE•GREGORY•CHARLES MIX

Summer 2021

Focusing on cedar tree control and grassland health

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Welcome

Staying the course in 2021

By Keith Hovorka & Sean Kelly

2021 has definitely been filled with ups and downs for the MMRPBA to date. As Covid-19 restrictions started loosening up early this spring, we were able to resume our burn planning. We had several scheduled burns from 2019 and 2020 that needed their burn plans updated. We also had new inquiries from landowners wanting to burn this spring. We had roughly 3,000 acres of cedar tree control burns scheduled and roughly 70 acres of strictly grass and CRP burns scheduled for this spring.

Then, we were hit with a massive punch to the stomach in March. We lost Dave Steffen. Dave passed away on March 23, 2021 at Monument Home Health Hospice in Rapid City, SD. Dave had such a passion for prescribed burning, rangeland health and the MMRPBA. Losing him has been felt in every aspect of the MMRPBA. As many of our members are aware, Dave's passion and expertise for rangelands touched every corner of South Dakota. We will never be able to replace someone of Dave's caliber, but the MMRPBA will continue to do its best combating the eastern red cedar and getting prescribed fire on the ground.

The MMRPBA burned roughly 1,000 acres of cedar tree control burns this spring and roughly 40 acres of grass burns. It was a great feeling getting prescribed fire on the ground again after a 2-year hiatus. As always, the weather was full of challenges this spring, ranging from extreme wind days, red flag days, and days of too much precipitation, but in spite of those challenges, getting fire on the ground felt like a huge accomplishment.

As we move through summer, the MMRPBA will continue to work with landowners planning prescribed burns for 2022. The interest in prescribed burning continues to grow in our 4-county area and around South Dakota. Please enjoy the information shared in this newsletter as we continue to work toward the MMRPBA mission.

Looking ahead, we plan to resume our annual membership meeting this winter. Please check our Facebook page and website for further details on time and dates.

On the Cover:
Sarah Bailey photo from the Justin and Sarah Bailey prescribed burn.

Mid-Missouri River Prescribed Burn Association News
Sponsored by the Mid-Missouri River Prescribed Burn Association and SDSU Extension
Editorial Coordinators: Trailhead Promotions, Kindra Gordon & Codi Vallery-Mills
Graphic Design: Branding Impressions, Breezy Millar & Cassie Hicks

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MMRPBA
2020-21 Officers

Keith Hovorka, *Chairman*
100 Cleveland Ave.
Fairfax, SD 57335
(605) 464-0377

Tom Hausmann, *Secretary*
2209 Western Ave.
Yankton, SD 57078
(605) 770-5576

Sara Grim, *Treasurer*
35801 Old 1806th Road
Bonesteel, SD 57317
(605) 654-2288

Brad Christensen, *Training Officer*
1022 Whittecar Ave.
Gregory, SD 57533
(605) 830-0931

Sean Kelly, *SDSU Extension Liaison*
33815 288th St.
Gregory, SD 57533
(605) 840-2200

Greg Schmitz, *Director*
36296 Eldeen Ave.
Bonesteel, SD 57317
(605) 654-2894

Doug Feltman, *Director*
25361 341st Ave.
Chamberlain, SD 57325
(605) 234-4143

Brad Pistulka, *Director*
36223 Eldeen Ave.
Bonesteel, SD 57317
(605) 261-2446

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A Tribute to Dave Steffen

By Rich & Sara Grim, June 5, 2021

David Steffen (June 9, 1946 - March 23, 2021) is shown at right at a grazing school identifying plants.

Whew, I don't know where to start, it seems like Rich and I have known Dave forever.

Looking back, one of the first programs we were involved with was the Bootstraps program back in the 1990s. We knew Dave had been with NRCS and that he'd moved back to the area. But we had no idea then how big of influence he would have on our operation. We were always looking for new ideas or better ways to do things, and Dave gave us the confidence and guidance we needed to try new things on our ranch.

I remember in particular one project he helped with was doing a range inventory. I so clearly recall thinking at the time that he did not point out our shortcomings—or use criticism to show us how much **HE** knew about things—but instead chose to encourage and compliment the good points of the ranch.

Dave was a noticer, and he showed us all the healthy native grasses that we had growing on the ranch. He was so knowledgeable about so many weeds and grasses – I was always in awe and could listen to him talk forever. He also made us feel like we had something special, and he had that skill with so many people. He would notice them and take a little extra time to help show them what was special about them.

I have to mention a photo shoot Dave helped set up on the ranch with all the native grasses when our girls were small. I'm honored when I still see those pictures show up all over the place in different publications, and I will always think of Dave when I see them. He certainly left little legacies like that sprinkled all over the community, state, and region.

But I think the most memorable moment was when Dave came into the Courthouse where I worked in the Treasurer's office and said: "Sara, *what* are we going to do about the *Cedar Glacier*?" This would be the start of partnership that will always be a point of pride and purpose for me, and I'm grateful to Dave for that gift.

So, he and I cooked up a plan to mail out letters to all Gregory County landowners that were affected by Eastern Red Cedar trees and start to hatch a strategy to do something about it. He was so pleased that the Grassland Coalition gave us our first $50 to mail out all those letters. That was the start of the *Mid-Missouri River Prescribed Burn Association*, and now it is the first burn association in all of South Dakota. Dave was so proud of all that we have accomplished. He helped us personally with several of our burns on our land, that was the kind of guy he was. Always curious, always eager. Always wanting to help someone, and he only wanted the land to prosper in return!

Dave was never in it for the money, it was always a new experience. He was a lifelong learner and tryer of new good things, and he showed a lot of courage jumping into many hobbies and practices. Open minded and adventurous. Kind to absolutely everyone – much more likely to tell you a story that would make you chuckle than to get cross over politics or religion. I think it's a real mark of a good heart when someone can make friends all throughout his life with people from age 10 to 80 like Dave could over and over again. Laughing with Dave Steffen was one of my favorite things to do.

He was never selfish, and he lived a humble and frugal life. He'd rather get excited about a new idea than ever grumble about someone having more abundance or less suffering than him. He loved living on his family's homestead in the original house, and he was so very proud of the family farm and all that he had accomplished on it.

The last time I visited with Dave, he congratulated us on winning the *Hugh Hammond Bennett Conservation Award*. He called to make sure we knew how proud he was of us. He kept saying, "This is really a big deal!" I wish I could have that conversation back because I didn't know it would be the last one.

Dave, you are so missed by many of us: family, friends, mentees. But in your honor, we will continue to burn cedar trees, rotate graze our pastures, find new ideas to build better pastures and ranges, and tell stories that warm and mend our friends' hearts like you did.

We miss you, Dave!

The Mid-Missouri River Prescribed Burn Association is a non-profit 501(c)(3) formed to control cedar tree infestation and improve grassland health by conducting prescribed fires. MMRPBA's efforts will focus on land in Brule, Charles Mix, Gregory and Lyman Counties, with the goal to conduct 2,000 acres of prescribed burns each year for the next three years.

Looking Ahead & Broadening Burn Efforts

The need for local groups taking initiative

By Tom Hausmann

There is a need for more localized groups beginning to organize their own fire brigades.

One of the important, over-arching organizational goals of MMRPBA when first formed was to help local groups learn how to plan and effectively implement their own burns.

As our membership has gained experience over the last few years, the entire group has developed more expertise and confidence toward this effort. While everyone had a lot to learn in those "all hands on deck" burns in the beginning, we scheduled only a few burns likely due to a degree of skepticism about the effectiveness of burning as well as concerns about the methods we would use to "control" our burns.

However, because of our careful planning and post-burn evaluations, we found our burns were successful in both the methods used and the burns' effectiveness.

Now, of course, the organization has had more and more requests for help with burning. However, burning the last three years has been difficult for all of us with weather conditions being either too wet to too dry and creating a back-log of burn opportunities. So, on one hand, we find too many requests for assistance is a problem. On the other hand, we have more and more people gaining confidence in burning because of the success rate they have seen, and that means the organization is reaching this over-arching organizational goal.

Local Leadership

The answer to the problem is a need for more localized groups beginning to organize their own fire brigade. MMRPBA may still provide thoughts and ideas in the early planning stages of a burn but simply does not have the manpower to manage each burn. Consequently, several groups have already realized the benefit of creating their own burn teams. And, some have begun to acquire equipment to conduct burns on their own without much outside assistance.

One significant advantage of having a local team is when the window of opportunity to burn arises, enough people are nearby who can adjust their schedules to assist rather than asking people to drive a couple of hours or more on short notice.

Developing a local burn team starts with education, and that won't happen quickly. Some members will likely need to attend seminars, workshops and certainly local burns not just as a bystander but to actually get involved in the different aspects of implementing the burn plan.

For instance, a member actually becoming part of the ignition crew gives insight into the actual stress, concerns, and cautions the crew is considering in each step. Another member of the local team might work with people defending along the black lines to see what their responsibilities and concerns are. Another activity to develop confidence in taking more responsibility for a burn is visiting with another group early in the planning stages of their burn to learn what unique issues or special considerations they are battling. All of this information regarding the process and responsibilities will increase the understanding and confidence of the group to implement their own plan.

After gaining practical experience attending burns or seminars, writing the burn plan is the first thought provoking tool to help determine the necessary labor force in terms of total people, level of expertise required, and type of equipment needed as well as other climatic and legal points that must be considered. In regards to solving the available labor issue, a landscape burn that includes more acres with more than one land owner might help simplify not only the preparation required before the burn but also the number of people and equipment necessary. Again, because of their own experiences, MMRPBA has developed the expertise to help develop these ideas and possibilities.

Obviously, the time and effort to conduct an effective burn varies significantly. While many of the basic concepts will always apply, often burns turn out to be fairly simple. MMRPBA leadership will always be available to provide advice in the early planning stages and may be available with equipment and some personnel at the actual implementation. However, because of distance and other job-related responsibilities of MMRPBA leadership, those people may not always be available when the time to burn is ideal. Creating, organizing, and developing local expertise is the only real solution for all of us to accomplish the goals we have in ridding our pastures of cedar trees in a timely, safe, orderly fashion.

After gaining practical experience attending burns or seminars, writing the burn plan is the first thought provoking tool to help determine the necessary labor force.

Spring 2021 offered MMRPBA a chance to conduct several prescribed burns.

When conducting a burn, equipment, terrain, labor and weather are all factors that need to be considered.

Get your fire breaks done this Fall

Every burn season has myriad of challenges – from weather to labor availability. Getting fire breaks mowed this fall can ensure you will be ready next spring if the burn season starts in early March or late February. Mowing should be completed in the fall when the grass is drying down and after the first hard freeze. It is also important to remove as much litter and duff as possible from the fire break because it will create a hazard during the prescribed burn. If the litter is not baled, try to rake it out 30 or 40 yards in the standing grass of the fire unit.

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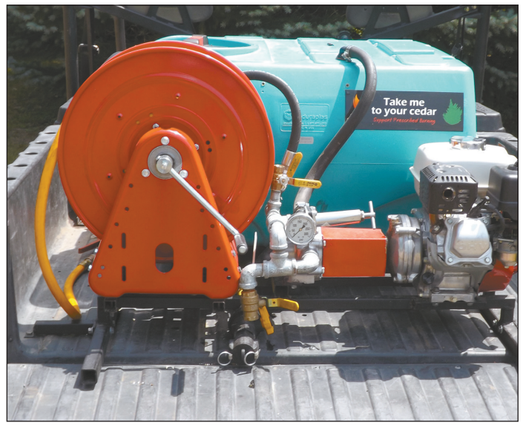
Equipment Update: Designing the ideal UTV Skid Units



The MMRPBA Ranger outfitted with a skid unit that includes a 60-gallon water tank.

By Brad Christensen

The Mid-Missouri River Prescribed Burn Association added two UTV skid units to our equipment list. One unit is universally designed to fit in most utility UTV's. This unit is kept in the MMRPBA burn trailer and used by members when they have a UTV available but do not have spraying equipment. The second unit was built for the MMRPBA's Ranger 6x6 and is bolted to the bed of the Ranger.

The Journey

Before MMRPBA was even established, Dave Steffen and I looked at lot of combinations of pumps, engines and tanks to build UTV and ATV skid units. There were many different styles of pumps being used by fire departments as well as individuals and groups conducting prescribed burns. Commercial sprayers and fire skid units designed for UTV's were expensive and didn't meet the requirements we thought we needed.

We decided that a roller pump was the best option for both pressure (PSI) and flow (GPM). We looked at direct drive vs belt drive. Our options were pumps with 4, 6, or 8 rollers. We knew we were limited to 75 gallon or less water tanks due to the carrying capacity of the UTV and stability in the Missouri River breaks. We wanted a pump that would provide a minimum of 6 to 8 gallons per minute of water flow with at least 150 psi of pressure.

Dave built two units: one for his ATV with a 4 roller pump and one for his UTV with a 6 roller pump. I rebuilt the Gregory Volunteer Fire Department's (VFD) skid unit on the Polaris Ranger 6x6. It now has a 4 roller pump (Hypro 4101C) on it. They all work well.

When Sean Kelly joined the MMRPBA he was working on building a skid unit for his UTV. He looked at what Dave and the local fire departments were using and visited with friends and colleagues to see what ideas they had. He decided to base his design on a unit that Dusty Tacha from Pretty Prairie, KS built. There is a YouTube video titled "Kansas Skid Unit: UTV Fire and Sprayer Skid Unit" that shows the unit and describes how it's built. The link is available at https://www.youtube.com/watch?v=2qS_gPjND4w.

The skid unit he built has a Honda GX160 UT2HX2 6:1 gear reduction engine, a Hypro 7560CR 8 roller pump, a 60 gallon Enduraplas water tank, a Textron 50 foot ½ inch retractable hose reel and hose, and a Hypro 3381-13 nozzle. The skid unit turned out great and works extremely well.

Sean Kelly's skid unit - modeled after a Kansas unit on YouTube - provided inspiration for the MMRPBA's skid unit design.

When we decided to build skid units for the MMRPBA, we decided to build them the same as Sean's with a couple of minor changes. We used a Hypro 7560XL (silvercast) version of the roller pump and made the units drainable. The ability to drain the units is necessary for "winterizing" when conducting burns during the late fall through spring when the temperatures can fall below freezing at night. The XL (cast stainless steel) pump will last longer than the cast iron version and it runs quieter. We got a really good deal on the pumps. Also different from Sean's, the units have 100 feet of hose with a hand crank reel.

Winterizing

To winterize the units, you open the drains on the tank and pump. When the water is drained you close the drain valves, add a gallon or 2 of RV antifreeze to the tank, start the engine, place the nozzle with the handle squeezed into the tank, and let the pump run until antifreeze comes out the nozzle. It only takes a few minutes. Then, the next time you want to use the skid unit just fill the water tank, check gas and oil levels in the pump, add if needed, and you are ready to go. Sometimes the RV antifreeze will look slushy or even frozen when really cold, but it doesn't expand and break fittings like water when it freezes.

Additionally, a universal skid unit is available to MMRPBA members to bolt on and use with their own Ranger.

Lessons learned using UTV skid units on a burn

Almost all of the UTV skid units used on our burns have similar sized engines and similar sized water tanks. Consequently, they can all run out of water at about the same time. And on long prescribed burns they usually all run out of gas at the same time.

Thus, when on a prescribed burn keep track of how much water and gas you have. When you are working with other similar sized units make sure to stagger when you fill up. Wherever the water source used to refill the water tank is located, there should be a gas can nearby.

Ignition of the prescribed burn stops when a unit runs out of water and there is not another unit to take its place. Ignition only resumes when adequate crews and equipment (as outlined by the burn plan and/or ignition plan) are ready to continue.

When possible, stop ignition before you get to a critical or difficult to control spot on the fire break. Stop long enough for the units to check water and engine gas levels and refill if necessary. Make sure all the crew and equipment are ready before you proceed.

Don't leave a burning control line unattended or without a means to control any slop overs. Someone with adequate training and equipment must patrol the control lines until all of the fire is "out and cold." You don't have to camp on the burn if most of it is out but you need to check it for the next few days.

Several years ago, the Gregory VFD responded to a grass fire on Easter that was started from haystack butts burned on Thanksgiving weekend. It snowed the day after the burn with the last of the snow melting the week before Easter. The temperature warmed up to 70° F and the fire came to life. True story.

That's a pretty extreme example but what looks completely "out" can burn through or over control lines days after the burn is conducted given the right fuels and conditions. When possible after the burn cools down, a single section of a drag can be used to make a couple rounds inside the control line to help spread out manure piles and duff that may contain smoldering embers.

Communication and coordination between crews and within crews is critical to safely conducting a burn. Everyone needs to know what is happening. Don't assume crew members know when you run out of water or have equipment issues. Use the radio to let everyone know. If you are working on a slop over don't be "too busy" to use the radio. Ignition stops when there is a slop over. Use your radios.

The number of personnel and equipment in the burn plan is the minimum required to conduct the burn. More can be used as long as safety protocols are followed.

A successful prescribed burn can only happen if there is a good plan, good preparations, and careful execution of the burn plan.

Now is the time to prepare for next year's burns. If you want to burn next spring, you should already have a start on the planning and preparation of your control lines.

If you have any questions or comments please call me at (605) 830-0931.

- Stay safe, Brad Christensen

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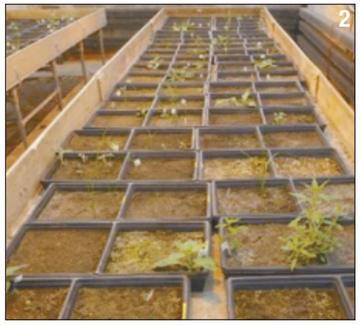
SDSU Research efforts continue exploring eastern red cedar infested rangelands

Graduate student Robby Schaefer taking a seed bank/bud bank soil core (10 cm diameter by 10 cm depth). (Photo by A. Domeier, 2020)



Soil from cores taken under eastern red cedar tree canopy (UC), canopy edge, 2-m from the canopy edge, and 5-m from the canopy edge (grassland) mixed with potting soil and planted in plastic trays. (Photo by A. Domeier, 2021)

Transplanted seedlings from seed bank trays grown out to maturity to aid in identification. (Photo by A. Domeier, 2021)

By Austin Domeier, Sandy Smart, and Lan Xu

The research team at SDSU has been busy collecting data on demonstration sites as part of the NRCS-CCGA joint project with the MMRPBA – even though wet weather, COVID-19, and now drought have tried to hinder these efforts.

Last fall, graduate student Austin Domeier, with the help of Robby Schaefer (see Photo 1), collected soil cores to examine the seed bank and bud bank from the demonstration site in Brule County on Todd Olson's ranch. Ten large female trees were selected and soil samples were collected using a 10 cm diameter corer under the eastern red cedar tree canopy, canopy edge, 2-meters away from the canopy edge, and 5-meters away from the canopy edge (grassland control) in four cardinal directions. A total of 32 samples per tree were collected for both seed bank and bud bank (16 each), totaling 320 samples overall.

The 160 soil seek bank samples were brought back to Brookings, sieved to remove roots, rocks, etc., and the soil was planted in plastic trays mixed with potting soil in the greenhouse (see Photo 2). Once a week for 16 weeks, seedlings were identified, counted, and removed from the trays. Unknown seedlings were transferred to bigger pots and allowed to grow to maturity to aid in identification (see Photo 3).

A total of 12,591seedlings emerged representing 89 different species (Table 1).

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Table 1. Total number of seedlings emerged and species from seed bank soil samples located under eastern red cedar (ERC) tree canopy, edge of canopy, 2-m from edge, and grassland (5-m from edge of canopy).

Sample location	Total Seeds Germinated	Species
Under ERC canopy	3328	63
Edge of canopy	2653	58
2-m from edge	3160	57
Grassland (5-m from edge)	3450	58

Table 2. Average number of seedlings from seed bank soil samples located under eastern red cedar (ERC) tree canopy, edge of canopy, 2-m from edge, and grassland (5-m from edge of canopy).

Sample location	Introduced grass	Native grass	Introduced forb	Native forb	Shrub	Tree
Under ERC canopy	44.2	5.4	7.0	26.3	0.03	0.25
Edge of canopy	39.6	3.2	3.6	20.0	0	0
2-m from edge	43.0	4.9	4.6	26.5	0	0
Grassland (5-m from edge)	42.1	3.4	4.9	35.9	0.03	0

Table 3. Average number of buds on crowns and rhizomes from bud bank soil samples located under eastern red cedar (ERC) tree canopy, edge of canopy, 2-m from edge, and grassland (5-m from edge of canopy).

Sample location	Introduced grass	Native grass	Forb	Shrub	Unknown
Under ERC canopy	12.66	2.03	3.28	0.65	0
Edge of canopy	113.85	38.41	17.13	1.83	0
2-m from edge	125.46	78.38	22.81	1.08	1.03
Grassland (5-m from edge)	137.5	66.18	23.05	1.53	0.85

Grim's share "crop watcher" reports from Gregory County

Richard and Sara Grim on their ranch in Gregory County, SD. The 3,600 acre ranch has been in Sara's family for generations.

Editor's Note: MMRPBA board member Sara Grim and her husband Rich are currently providing a bi-weekly crop watcher report featured in the Tri-State Neighbor newspaper. It has provided an opportunity to highlight their operation, as well as the efforts of the MMRPBA. Following is their report from May 26, 2021

Greetings from South Central South Dakota where we are bordered by the Missouri River on the east and the state of Nebraska on the south. The area has a diverse terrain from the rough river hills along the river following along Hwy 44 over the Platte/Winner bridge to the rich farmland that follows Highway 18 and the unique small towns of Fairfax, Bonesteel, St. Charles, Herrick, Burke, Gregory and Dallas. The sandy soils of the Sandhills start to emerge in the area south of Hwy 18. We live down along the river and have mostly pasture land and hayland. We have few farmland acres but manage to grown a few crops for feed for the cattle.

Our spring was colder and drier than normal which maybe has been protecting the grass and crops that have been trying to grow. Many cattlemen fed hay longer as the grass is slow to emerge because the soil temperature has been slow to warm up. With the lack of rain, it seems like the month of May was going great guns with hardly a break anywhere. We had a small amount of moisture during the month of April but May has been even shorter. The rain gauge says only 1.28 inches of moisture for May which has come in the form of small showers but I know the area up west of us has had more moisture. We are green here and thankful for what we have but we have started Phase 1 of our drought plan. The fall calves are still in the yard and will be sold in June and the River pasture that we had deferred grazed the past 2 years, will be used for grazing cow calf pairs. We had planned to burn our River Pasture to get rid of the Eastern red Cedar infestation but it will now be part of our contingency plan. We are thankful to have the old grass to fall back on and maybe this summer we will do more shearing and stuffing of the Cedar trees and prepare for a burn next season.

The Mid Missouri River Prescribed Burn Association of which we are members was able to complete some very successful burns this spring. We helped with a couple of them and loved to see the success that prescribed fire has on the Eastern Red Cedar.

We have a few small patches of farm ground and our oats was planted in April and the corn in May. We have worked the ground in preparation for planting millet but it needs some more rain on it. The corn is just emerging and the oats is up but everything needs moisture. Our alfalfa is looking good and we will be spraying that for bugs. The area farmers have had a good planting season as the corn is all done in the area and they are finishing up on soybeans but everyone is in agreement that they would rather have the moisture!

We also had good weather to complete our branding season. We only have the late calvers left to work and have started to move everyone to their summer pastures. We are scheduled to test bulls and preg check the fall cows next week. We also have a group of old cows with calves that we will not put bulls with and will start the calves on creep feed. The plan is to get the calves eating and sell the old cows which may be earlier than usual if we don't start getting some moisture.

Another concern I have heard from the neighbors is water for the livestock. There was no snow runoff for the dams and of course the rains this spring have all soaked into the ground so no runoff there either. Even the springs that have been open the past few years have dried up making water access a lot harder. We have turned on our tanks and are thankful to have the pipelines and tanks.

I don't mean to sound all gloom and doom but when we are short of moisture, it makes for excessive worries. We are blessed that we were able to get everything planted, all the cattle worked, spend time helping neighbors burn, help at the flower shop in Burke (our daughter's business) celebrate birthdays, graduations, concerts and the end of the school year. Seems like we are kind of getting back to a little bit of normal. We are seeing people that we haven't seen for over a year!

But things won't be slowing down as we spray weeds, get machinery ready for hay, continue to check cattle and pastures, keep fences fixed, and may kill some more cedar trees!

Continued from page 7

The edge of canopy had less seedlings emerge in comparison to the other three treatments which had similar seedling emergence. Under the eastern red cedar canopy reflected the highest treatments which had similar seedling emergence. Under the eastern red cedar canopy reflected the highest species richness whereas the other treatments were similar in richness.

Most of the seedlings from the different locations were introduced grasses and native forbs with very few shrubs and trees (Table 2). The introduced grasses were dominated by Kentucky bluegrass, smooth brome and yellow foxtail. Native grasses consisted of green needlegrass, tall dropseed, needleleaf sedge and little bluestem. Introduced forbs included yellow sweet clover and several thistle species. Native forbs included wooly verbena, prairie coneflower, wild bergamot, heath aster, and many other common wildflowers.

Bud bank

The 160 soil bud bank samples extracted at the four treatment distances were brought back to Brookings and stored in a 4C refrigerator awaiting lab procedures. Samples were then washed with high pressure water to remove the soil from the soil cores and expose plant propagules. Roots were removed from individual plants and their propagules were separated into crowns and rhizomes. Buds were identified on crowns and rhizomes using a dissecting microscope to the functional group level. As expected, there were not as many buds under the eastern red cedar tree canopy compared to the other locations (Table 3). The interesting finding was that introduced grass bud bank was very high compared with native grass, forbs, and shrubs.

Implications

Seed bank and bud bank studies are very rare in prairie systems. These findings give a glimpse into the mechanisms of the potential plant community following eastern red cedar tree removal (either by fire, mechanical, or other means). Our data supports that the pressure from the seed bank and bud bank will likely favor establishment of introduced grasses, native forbs, and introduced forbs. Unfortunately, the native grass seed and bud bank pool was not as large as the other functional groups. The true litmus test will be when we examine the plant community after the burn. We will have to wait until next year to get the results because we were unable to burn our demonstration sites due to the burn bans put in place because of the 2021 drought.

Great Plains Fire Summit

& Patch Burn Grazing Conference

September 21st–23rd, 2021

Ramada by Wyndham - Sandhills Convention Center
North Platte, NE

Join us for the joint 3rd biennial Great Plains Fire Summit and Patch Burn Grazing Conference hosted by the Nebraska Prescribed Fire Council in North Platte, Nebraska. We are putting together a can't miss conference filled with state and regional information about prescribed fire. Don't miss this opportunity to be around prescribed fire advocates from across the Great Plains.

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  - Wildlife and Fire
  - PBA's
  - Lessons Learned
  - Producer Stories
  - Weather and Climate
  - Burn Planning
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- Photo and Art Contest
- Poster Competition
- Regional Awards
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- Prizes

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Growing Resilience effort spotlights prescribed burn projects to control eastern red cedar from spreading

By Emily Helms, South Dakota NRCS State Rangeland Management Specialist

South Dakota NRCS and University of South Carolina researcher Buz Kloot and staff have been working on a "Growing Resilience through our Soils" campaign to help promote healthy, resilient rangelands through sound management practices. The latest installment of the campaign focuses on the woody encroachment issue facing the Missouri River Breaks landscape - and beyond.

In April, the MMRPBA 4-county area was visited to film some of the pre- and post-burned sites on the Mulehead Ranch, Rich and Sara Grim Ranch, and Doug Feltman operations. They were able to see much of the issues facing area producers and focus on some of the management practices needed to help combat the woody encroachment issue.

The campaign has recently published a few different products viewable and usable by anyone with Internet access. The campaign is bolstered by a website: www.growingresiliencesd.com. The featured content "Eastern Red Cedar: A Burning Issue" can be found on the main page, or under "Content." Available content includes a featured video (about 10 minutes long), plus a playlist of shorter videos (each 2 to 3 minutes long) focusing on different aspects of prescribed burning in the MMRPBA's area.

Other products produced include a factsheet, a Question & Answers document, and two informative podcast interviews featuring SDSU Extension Range Specialist Sean Kelly, and NRCS Rangeland Management Specialist Rod Voss. Articles about prescribed burning and eastern red cedar issues have also been published online by Dakota Farmer.

Visit www.growingresiliencesd.com to view the videos and other content

Fire Workshop Lights a Spark

By Kris Miner

Growing up in South Central South Dakota where we can be dry, and being raised by a Dad who was very, very concerned with anything starting on fire instilled a fear in me related to prairie fire. As a kid we had some ground hay ignite, and I went along with my Dad in the middle of the night when a neighbor's bale pile was struck by lightning. I still remember seeing the fire from our home and how odd it looked to see the sunrise in the south instead of the east where it should be - it was a big fire! I share these anecdotes because I recently attended the SD Grassland Coalition's Landowner Fire School, where when we finished the classroom portion of our training we then changed into proper clothing, and it was time to light the grassland on fire. I felt those past fearful relationships with fire in my belly.

The hands-on portion of fire school changed my fears and my relationship with fire, at least with prescribed fire anyway! Wildfires are something very different, lighting strikes and spontaneous combustion fires are something else and are unplanned. Our professional instructors from SDSU Extension, NRCS, Audubon, the Nature Conservancy, and other organizations gave me the confidence and trust to rethink the role of controlled fire and how to manage it. When I saw the fresh water on the edge of the fire line, when people had assigned areas to watch, my confidence grew. When I was invited to lay down fire, I quickly accepted. It was a chance to see and feel the experience and add context to my fearful experiences. When I finished lighting the assigned section, I lifted the drip torch and extinguished the fire with my leather gloved hand. As a team, with good communication and lots of planning we quickly and easily burned a small section of land, with things staying under control in a 12-mph wind.

What I learned about prescribed fire is that it is a tool to be used productively. There are certain benefits related to the time of year that you burn. For example, the eastern redcedars have protective sap flowing later in the spring, so if you goal is to clear them you may have to consider carefully when you would decide to use prescribed fire. As landowners, we get to make decisions about goals to help clear brush, shrubs and trees or to rejuvenate the land and encourage native plants. Fire really is an effective tool when used carefully and with lots of planning. After seeing and feeling the experience first-hand, it lit a spark in me to consider how I might use fire on the land I care for. It got me looking at my goals and how prescribed fire might help me reach goals.

There are experienced and skilled agency staff around the state that can help guide fire planning. Emerging landowner-led cooperatives like the Mid-Missouri River Prescribed Burn Association offer planning and fire implementation resources.

– Kris Miner is Communications Director for the SD Grassland Coalition

The SD Grassland Coalition hosted a Landowner Fire School earlier this summer

Kris Miner

Mid-Missouri River Prescribed Burn Association
Sean Kelly
33815 288th Street
Gregory, SD 57533

Pictured: In 2021 the Mid-Missouri River Prescribed Burn Association burned 1,000 acres in efforts to promote grassland health and control eastern red cedars.

Become a MMRPBA member

Mid-Missouri River Prescribed Burn Association

(Brule, Charles Mix, Gregory & Lyman Counties South of I-90)

Membership Application

Join Us!
Annual Meeting
January 11, 2022
Bonesteel Community Hall
Bonesteel, SD

Name: _____

Address: _____

City, State, Zip: _____

Home Phone: _____ **Cell Phone:** _____

Email Address: _____

If you own land that may be burned in the future, which county is it located in: _____

Category of membership requested: (Check one)

Individual Membership: (May vote, dues $25) _____
Organizational Membership: (1 vote/organization, dues $25) _____
Name of organization represented: _____
Associate Membership: (No vote, no dues) _____

I wish to become a member of the Mid-Missouri River Prescribed Burn Association and agree to pay the applicable $25.00 membership dues, certify that I have never been convicted of a felony or crime involving arson, sexual misconduct or extreme immorality and, agree to a background check.

Signature: _____ Date: _____

Return Application and Membership Fee To:
Sara Grim
35801 Old 1806th Road
Bonesteel, SD 57317

Make membership fee checks payable to: MMRPBA

The Mid-Missouri River Prescribed Burn Association is a non-profit 501(c)(3) formed to control cedar tree infestation and improve grassland health by conducting prescribed burns. MMRPBA's efforts will focus on land in Brule, Charles Mix, Gregory and Lyman Counties with the goal to conduct 2,000 acres of prescribed burns each year for the next three years.