Laramie County Conservation
District Board Meetings
The Third Thursday of each Month at 4:00 pm
Laramie County Conservation District Office
11221 US Hwy 30
Cheyenne, WY 82009

Wyoming Association of Conservation Districts
Annual Convention
November 14th–16th
The Evanston Roundhouse
517 E 19th St
Evanston, WY 82930

Laramie County Conservation District
Cheyenne, WY 82009
(307) 772-2600

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This year has been a challenging one for rural agriculture as well as residential interests. Long dry spells, severe hail storms, and early snow has challenged our crops and trees. Those challenges have been felt at the conservation district as well. As many of you may recall, our District Manager Jim Cochran, has retired to greener and arguably sunnier pastures. His absence has allowed one of our own, Tree Specialist Shaun Kirkwood, to champion Jim’s vacancy and navigate the conservation waters in his own way.

While Shaun has been wearing two hats as both the District Manager and Tree Specialist, the other departments have been busy putting conservation on the ground. Many of the practices completed are familiar to district operations, while some have been recently added and are quickly becoming a growing fixture for the district’s annual plan of work. With that said, we invite you to read through the following pages and see the work that goes into conserving the natural resources of Laramie County.
Change At The Conservation District

As the seasons change, so have roles at the Laramie County Conservation District. For the past 16 years, the conservation district has been led by Jim Cochran. In early August, Jim was stung by the retirement bug and is now busy with other adventures. Being said, in mid-August Shaun Kirkwood changed roles from the Tree Specialist to District Manager. Shaun has spent the last 4 years as the Tree Specialist promoting tree health through on site visits and community outreach. Shaun will continue to help out with the district tree program, until a new Tree Specialist is ready to take over tree hugging duties. Shaun believes in change, and will strive to keep conservation on the ground in Laramie County. His role as the new leader will be one that allows him to be out working on projects with district employees and also administering community conservation ideas for Laramie County.

Wrapping Trees

Many thin, smooth barked trees are susceptible to sunscald. Some susceptible species are maple, pear, willow, ash (immature in age), honey locust, and many fruit varieties. This damage includes recently planted, exposed or pruned trees. Intense winter sun that is direct or reflected, encourages plant cells to warm, thus refreezing as temperatures fall. Once damage has occurred, the outer most live tissue begins to change color, roughen and crack while it dries. Many tree species are vulnerable to this winter injury because they have not formed a thick layer of bark. Prevention is easy and many tree wraps are available. Best approach, is to wrap the tree after a good killing frost. This prevents insects from taking up shelter under the wrap. Removal in the spring is highly recommended, allowing the tree to grow without obstruction. Trees do not exert much outward pressure and can be easily strangled.
Desiccation or winter burn can be a severe problem of newly planted evergreens. Damage will be more severe on the side of the tree exposed to prevailing winds. Low soil moisture, freezing temperatures and constant wind are contributing factors. With these 3 factors in place, evergreens lose moisture through transpiration faster than their roots can replace it from the frozen ground.

Listed below are some of the best management practices to combat these issues:

1. winter water: above 40 degrees, with mild winds, 10 gallons per inch of diameter, monthly
2. provide a wind barrier to shield the tree
3. organic mulch, 3-4 inches thick, to the drip line of the tree, to stop soil moisture loss
4. application of an antitranspirant, these products stop water loss through transpiration

Annual Needle Drop

Every September and October, you’ll see your conifer tree shedding inner/older needles as part of its autumn needle drop, natural needle drop, annual needle shed or seasonal needle shed. This is not to be confused with needle cast, which is a fungal disease affecting conifers.

Some species, like most firs and spruces, drop single year needles a few at a time, which is less obvious. While pines drop two and three year old needles each autumn in larger amounts.

The autumn needle drop, associated with natural renewal, is uniform and appears all over the plant, visible at every growth level, from bottom to top, more commonly on the interior of the tree. The “old growth”. Normal seasonal needle drop occurs in autumn and should not involve needles at the branch tips.

Desiccation of Evergreens in the Winter Months

Longevity and Conservation

In mid-September, the Wyoming Association of Conservation Districts, the Wyoming Conservation District Employees Association president, and local conservation district employees, recognized two Laramie County Conservation District employees for their service throughout the years. Rex Lockman our Wildlife Specialist and Shaun Kirkwood our District Manager were recognized for 20 years of service to the conservation district in Laramie County. Job well done! We look forward to the next 20 years!
Summer months are often the best months of year for learning in the outdoors, especially from an ecological point of view. This year Paul was able to work with three different summer school programs and through those programs, teach their students about the importance of conserving water and habitat not just for crops and livestock, but also for wildlife and recreation as well.

One of the very first groups Paul started working with was from Arp Elementary. These students were very interested in how they could help keep their water clean. In the process of learning about clean water habits, Paul taught the students about water quality testing, how water moves through a landscape as well as the ground and how pollution can be reduced through simple means like planting stream bank vegetation.

Next up was the ASK Program held at Rossman Elementary. Here Paul taught two full lessons. The first being about water’s role in erosion and all of the various measures that can be used to help prevent it with the stream trailer. In the second lesson, Paul teamed up with Catherine Wissner of the Laramie County Extension Office, to help teach the students about wildlife in the local area and all of the unique adaptations that each uses to live in such a dry and windy place such as the Great Plains.

Later in the summer, Paul expanded his conservation education message to the students at the IYAH Learning Center. Here he taught about streams, point-source and nonpoint-source pollution, insects, and wildlife. Along with the new teaching program at the IYAH Learning Center Paul also teamed up with representatives from the University of Wyoming Agriculture Department to bring the Stream Trailer to Cheyenne Frontier Days to help teach about the importance of conserving water in our arid state.

Mechanical methods

These methods need to be done before the flowering stage, so that no new seed is distributed. If the plant is in the flowering stage, it is best to put at least the flowering portion of the plant into a plastic garbage bag for disposal. If there are no flowers on the plant it can be left on the ground.

Pulling/digging - This method will work but may take up to 4 years before it eliminates the plant. Since they are perennial and rhizomatous (has spreading roots) it is nearly impossible to get the whole root system on a plant that is one or more years old. Because of this each time the top of the plant is pulled off it will shoot up another sprout. It may seem useless to do this, but if it is continuously pulled, the plants roots will run out of nutrients. On old mature plants that have an extensive root system, it can take multiple times pulling to deplete the nutrients in the root systems.

Mowing - This should only be used as a last resort to keep the plants from going to seed. Mowing can increase spreading of the root systems. If you use this option only mow the infested areas leaving the other spots with good grasses to compete with the toadflax. Also when mowing in June, make sure to walk the area prior to mowing to determine if there are any ground nesting birds with nests in the same location. You will see the birds fly up as you walk the area. The nest can usually be located from where the bird flew up.

Bio-control  There are two different species of bugs available for toadflax control. The most effective is the Toadflax stem boring weevil Mecinus janthiniformis. The weevil is usually released in the late spring to early summer. Some areas have had good results while other areas have not. Results are usually better when there is a larger stand of toadflax.

Preventative

Early detection of an invasion in an area is the best way to keep toadflax out of an area. Inspect your property at least annually for any plants.

When an area of soil is disturbed for any reason seed the area back to perennial grasses. The conservation district will provide information on a good grass mix.

Do not overgraze pastures. Overgrazing reduces the capability of existing grasses to compete with weeds.
The WOLF in Sheep’s clothing

**Dalmatian toadflax (Linaria dalmatica)**

Dalmatian toadflax is a noxious weed that many people think is a wildflower with its pretty yellow flowers. It’s discouraging because Dalmatian toadflax was introduced from Europe as an ornamental and was soon outcompeting our native vegetation that’s vital for livestock forage. It has an extensive deep root system as well as a waxy leaf, which makes it extremely difficult for most herbicides to penetrate the leaves. The flowers are yellow with long spurs that appear at mid-summer. It will reproduce by seed and underground root stalks.

**Dalmatian Toadflax Control methods**

Herbicides This is the most effective method but cannot be used around trees, flowering plants, and gardens. There are several different chemicals available for Dalmatian toadflax. The most effective is a restricted use herbicide so you will either have to hire a contractor or get an applicator’s license. The other two can be obtained through the local weed and pest. One is for spring to early summer spraying and the other is for a fall application. The fall application is a spot spray only as it can damage some beneficial grasses.

The Laramie County and Wyoming State Fairs were also important in the month of August with Paul helping to set up an informational booth at the County Fair and bringing the Stream Trailer to the Wyoming State Fair. The Stream Trailer also saw use at the F.E. Warren Airforce Base Youth Center and Youth Annex where many of the students taught Paul everything they knew about water with him filling in the gaps.

September brought Paul, Kathy Cooney, and Shaun Kirkwood to the annual Cowbelle’s Ag. Expo where they taught 850, 4th grade students from across the county how to scarify (open) the hard seed coats of honey locust tree seeds so they can receive water and begin growing into the wonderful shade trees that are so common in downtown Cheyenne.

After the Ag. Expo, Paul then launched into field trips to the Thomas O. Kraner Outdoor School located just above Crystal Reservoir by teaching first Afflerbach Elementary’s first graders about wildlife, trees, and nature in general. In-class visits have also started too, with Paul visiting Carey Junior High School to teach about groundwater with his ground water model and a visit to St. Mary’s Catholic School where he taught the students about the different adaptations Wyoming’s wildlife has to live in such a challenging and beautiful landscape.

As the school year continues to ramp up, be sure to check out the Laramie County Conservation District’s Facebook page for more stories and photos of Paul’s classroom visits and field trips.
Coming to a Gutter Near You

Numerous projects have been accomplished sprucing up Cheyenne’s downtown area for residents and visitors alike. Whether its planting trees and flowers, renovating buildings, or hanging lights, people are getting out and enjoying the downtown area. Unfortunately, when more people are congregating in the downtown area, we notice a surge in the amount of trash blowing in around the streets of Cheyenne. The City does its best to clean our streets, but it just simply cannot capture every piece of garbage out there. Have you ever thought about what happens to those items that get missed by the street cleaners? Let me fill you in on a little secret. The next time you are downtown, stop and look into the stormwater catchment basins (aka “gutters”) lining the streets and you will find your answer. Inevitably a large percentage of the cigarettes, cans, bottles, cups, fast food wrappers, hydrocarbons, gravel, salts, dirt, pine needles, leaves, grass clippings and yes, dog refuse, all wind up in these gutters.

The intent of the stormwater catchment basins is to move stormwater from the City streets into an underground conveyance system. So, when these gutters are full of trash and a larger precipitation event occurs, what happens to the trash in those gutters? When I ask people that very question, I rarely get the right answer. The usual response is that it somehow gets to a water treatment facility. The actual answer is, those catchment basins all drain into a large drainage pipe, which then drains into an even larger main drainage pipe, which ultimately discharges into either Crow Creek or Dry Creek as permitted by the Wyoming Department of Environmental Quality.

So our stormwater system is just a large garbage disposal polluting our beloved Crow Creek? Well that’s not the intent by any means. We live in a windy city with over 60,000 residents. Trash is going to make its way into the system through this conduit; that’s just how it is. This is a common theme in every town and city across America. So get to the point Geyer, why are we discussing this issue?

The Laramie County Conservation District is entering the design phase of our Crow Creek Revival Project where our City’s creek is going to get a major makeover. Our concern is that we will spend a rather large amount of money on implementation only to have a constant contribution of trash accumulating in the drainage, detracting from a wonderful stream restoration project through town. Ya, I know, that doesn’t make any sense. So what are we doing about it?

The Conservation District partnered with all three Rotary Clubs of Cheyenne (Sunrise, Noon, and After Hours Clubs) to pursue a pilot project addressing the issue. A sub-committee of Rotarians submitted and obtained a $4,000 grant to address our water quality issues. All of the Rotary Clubs are working towards matching those funds and the Conservation District’s Community Enhancement grant over the next few months, so that the project can be implemented when spring arrives in 2019. The answer lies in a product called the “Gutter Bin”, which is produced by a Wyoming owned and operated company – Frog Creek Partners, LLC. The Gutter Bin is a retrofitting stormwater filtration system that removes everything I listed in the opening paragraph. It provides the first and probably most complete level of filtration possible in a city stormwater system. The Gutter Bin also allows the user to quantify pollution data for regulatory reporting. It truly is an amazing product that is currently being used in Long Beach and Carpinteria, California, Denver and Colorado Springs, Colorado, not to mention Casper, Jackson and Sheridan, Wyoming.

For more information, visit Frog Creek Partners Site and watch the video at https://frogcreek.partners/introducing-the-gutter-bin/

Stay tuned for more information and progress within our city. Join and support your local Rotary Clubs for all of the great work that they do in our community. Volunteer for Crow Creek Cleanup Day in May of each year!