Cass County Soil Conservation District

Winter Conservation News

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Tree of the Quarter: Flame Willow (Salix Flame) is a

cultivar of the White Willow. It is a fast-growing large shrub, adding 2'-6' a year in growth under optimal conditions. Leaves are narrow, lancet-shaped, finely toothed with a light green color. In the autumn, the color changes to a shade of yellow. The real beauty of the Flame Willow is expressed in the cold winter months. The stems are a vivid red to orange-red, and provide a bright splash of color in the otherwise dull greys and whites of winter. The brightest stem color occurs on new growth, so coppicing in the late winter can ensure vivid color for the next winter.



Flame Willow grows best on moist sites, and will not grow well on droughty sites. Full sun is recommended for best growth. Flame Willows make an excellent privacy screen for homes and farmsteads. In addition, the fast growth rate makes it a prime candidate for new home shelterbelts. Flame Willow can be included in machine plantings or purchased,

bare-root, from the Cass County Soil Conservation District.

Outdoor Heritage Fund Program Updates

The SCD, for the second year, has been fortunate to have received another Outdoor Heritage Fund grant through the North Dakota Industrial Commission. The Cass County Cover Crop Project (4CP) was very successful in 2018, cost-sharing over *2,500 acres* of cover crops! This program will again be available for 2019 for *first -time cover crop users* only. If qualified, users are eligible for 60% reimbursement of the seed cost. Interested parties can contact Watershed Coordinator Eric Dahl for an application.



Another exciting conservation opportunity afforded to Cass County by an OHF grant is the Cass County Windbreak Planting Initiative (CWPI). Tree plantings, such as field windbreaks, wildlife, and riparian plantings are eligible for 75% cost-share. This is a great program to get woody habitat on the land-scape. As with most grant opportunities, money is limited. If you are interested in diversifying your landscape with trees, contact us soon!

District Staff

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http://cassscd.org Check us out on Facebook!



Annual Report: 2018 was yet another great year for conservation in Cass County!

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- The District worked closely with our partners NRCS and FSA in setting up EQIP, and CSP contracts that involved either tree plantings or grass plantings. In addition, the Cass County Windbreak Planting Initiative (CWPI) proved very popular. The District was also fortunate to plant trees through a TCAP grant from the North Dakota Forest Service. We would like to thank all the cooperators in the county for giving the District the opportunity to apply conservation to their land. The District assisted these cooperators in planting over 230,000 LF of trees and installed over 184,000 LF of weed barrier. Almost 75,000 trees were planted in Cass County in 2018.
- ✓ Our Eco-Ed outdoor educational program was held at the Embden Community Center on September 20th. 155 students from Central Cass School and Ben Franklin braved the rainy weather while rotating through the five stations: Water Quality, Woodlands, Prairie, Wetlands, and Soils. The Red River Zoo finished the day off with a wonderful presentation.
- Maple River Watershed Project is open for sign-up and we are continuously accepting cost-share applications for management practices in the Maple River Watershed. This is the first year of the Project so if you are interested in cost share, be sure to sign up for the 2019 growing season. Practices include livestock management, cover crop, grass and tree establishment, septic system renovations, and more.
- The Urban Conservation program continues to expand. We took on many great projects throughout our community and held several community educational workshops including the construction of rain barrels and compost tumblers, The Pocket Prairie Initiative, Community Garden Grant, and Pollinator plantings continue to be poplar. We are continuously accepting applications, so contact us today!
- In celebration of Arbor Day and Earth Week, the District, along with many community partners including Fargo Forestry, Fargo Park District, Audubon Dakota, and River Keepers, hosted four events. ""Reforest the Red", our largest event, allowed community residents to participate in tree planting along the Red River to enhance the riparian forest. A pollinator garden was planted with the Fargo Park District, and educational workshops were done with Dakota Audubon. All events were well attended and over 10,000 trees were planted!
- In March, the District held the annual Ladies Ag Night at the Fargo Air Museum. The event featured Dr. Adnan Akyuz, North Dakota State Climatologist, as the keynote speaker. Ladies Ag Night is a special event to show appreciation for all the ladies that are involved with agriculture in Cass County.
- ✓ The District participated in the Ag in the Classroom program which was held at the Red River Valley Fairgrounds. This event educates approximately 2000 Cass County 4th graders on various agriculture and conservation practices.
- ✓ The District had a booth at the Home and Garden Show at the Fargodome. During this event, we meet many new people and discuss with them about the many services the District has to offer.
- ✓ The District had a booth at the Big Iron Farm Show. Big Iron gives us a great opportunity to discuss soil conservation with the producers that stop by the booth. During the show we also displayed our tree planting equipment at our shop at the fairgrounds.
- ✓ The High Plains Reader featured the District in an article on Urban Conservation
- ✓ Operations Coordinator Jeffrey Miller wrote an Urban Conservation article for the June issue of Midwest Nest magazine.
- ✓ USDA awarded the Fargo Field Office (SCD and NRCS) with the 2018 Outstanding Outreach Award.

All in all, it was a very productive and busy year. We look forward to working with producers and organizations to help Cass County continue to make strides in conservation!





Spring Workshops

We are excited to announce we will be expanding our **Pollinator Habitat Workshop** for 2019. In cooperation with the Clay County SWCD and Riverkeepers, this 2-part workshop will demonstrate the many benefits of a pollinator habitat, and learn how to transform a section of your property into a beautiful prairie garden! Focus is on what constitutes as a pollinator habitat, the importance of landscaping with native plants, and the instructions for installing one from start to finish. Participants will leave with a start of their individualized design plan, and a pollinator friendly kit to get started. In addition, we will continue with our popular **Make Your Own Rain Barrel** workshops and our **Make Your Own Compost**

Tumbler workshops. If interested, please register by calling Moorhead Community Education 218-284-3400 or by visiting their online registration. For more information on any



of the workshops, please call our office at 701.282.2157 x3.



"There was a solace in a snow-laden forest wrapped in night found nowhere else, a loneliness that me feel better acquainted with myself"

Lisa Lueddecke





Upcoming Events

January 1st— New Year's Day: Office Closed January 15th— Board Meeting: Fargo Field Office January 21st– MLK Day: Office Closed February 18th— Presidents' Day: Office Closed

February 19th– **Board Meeting:** Fargo Field Office February 22-24: **Home and Garden Show:** FargoDome February 26-March 1: **Ag in the Classroom:** RRVF March 14: **Ladies Ag:** Fargo Air Museum



Why plant native?

Prairie grass once covered Cass County. Prior to settlement in the late 1800's, the Red River Valley was dominated by tallgrass prairie, with trees being relegated to riparian areas. Glacial Lake Agassiz left a deep, rich topsoil that produced tall, lush native grasses and forbs. With the onset of settlement in the late 1800's, the rich soil was converted from prairie to cropland. Today, less than 3% of the tallgrass prairie remains.

While native grass and forbs can be more difficult to establish than domestic grasses, the benefits are many. Any native planting provides the benefit of being able to touch the past. With the small amount of native prairie left in North Dakota, any sized planting allows the landowner to, quite literally, resurrect their landscape. Grasses and forbs that may have not existed on a site for 100 years will burst forth, reclaiming their ancestral home.

Altruism aside, native plantings also provide other benefits. Maintenance, aside from the occasional mowing early to take care of weeds or burning, are minimal. The plants have evolved for our soils and moisture, needing little care. Another saving is fertilizer. Typical lawns require fertilizer and chemical to maintain their lustrous appearance. As noted above, native plants have adapted to the local soils, requiring no fertilizer or chemicals to grow well.

Lastly, native plants require less moisture. A typical lawn requires 10 gallons of water per square foot to maintain growth. Native grasses, with their deep rooting nature, require far less moisture. As any farmer can attest, moisture often comes irregularly, and native grasses are able to harness moisture whenever it falls for growth. For instance, Big Bluestem, a commonly planted native grass, has roots that extend 10 feet deep. Those deep roots are able to harness moisture.

Lastly, native plantings are breathtakingly beautiful. Mix designs ensure a long bloom period, with different forbs expressing themselves all summer. Black-eyed Susan, Pale Purple Coneflower, Goldenrod, and Purple Prairie Clover all lend a lovely splash of color to the grasses. Come Autumn, the grasses turn a rich hue, foretelling the winter to come. The beauty of the plants, however, pale to the beauty of the wildlife that thrive in these



environments. Whitetail deer, pheasants, sharptail grouse, prairie songbirds, and a dizzying array of native insect species all call native prairie home. With the lack of native grasses, once the local fauna find a prairie plot, they quickly move in and call it home. If you are thinking of taking advantage of native prairie plantings, inquire with the SCD today. We have cost-sharing programs available to make your dreams a reality.



Winter Tree Survival Adaptations

When the temperatures plummet and the icy wind howls across the landscape, it's easy to

picture the various wildlife in Cass County curling up in a windbreak or cattail slough. But how do our trees survive those same climatic conditions? Maybe because the trees stand silently in the face of blizzards, sleet, hail and rain, we don't think about the marvelous adaptations that allow them to thrive and grow. Trees that haven't adapted nearly always succumb to the elements during their first winter. The most obvious adaptation, for broad-leafed trees, is



leaf drop. During the growing season, leaves make it possible for the tree to transpire, transporting nutrients and water in the sap all the way to the leaves. However, when the tree enters dormancy in the autumn, an abscission layer develops in the leaf stem. The layer prevents water vapor loss, and signals to the leaf to fall to the ground. If the leaves didn't fall, they would add quite a bit of weight, which would shear branches after snowfalls.

Coniferous trees don't drop their leaves, but instead have smaller leaves (needles) that loose less water, as well as having a waxy coating to minimize vapor loss. In addition, the sap of coniferous trees are very sticky and resinous, helping them resist freezing, unlike deciduous trees. Another adaptation is the bark of the tree. Lighter colored bark, such as aspen and paper birch, reflect the winter's rays. This prevents the bark from heating up too much during the day. On the other side of the coin, dark bark heats up during the day, but sheds heat faster during the night. Scaly, furrowed bark acts as a diffuser. The many, thin layers of the bark are able to expand or contract with heat, cold and moisture. This adaptation protects the delicate inner part of the tree.

Trees in North Dakota are tough, amazingly adaptable members of our landscape. They are living, breathing marvels of nature. This winter, when cabin fever is working a fever pitch, bundle up and head outside. Clear a spot in the snow next to an old prairie tree, and take a seat. Take off your gloves, feeling the sting of the dry, cold air. Touch the bark of the tree, and realize that it is a living, breathing, and surviving organism, dealing with stressors as it grows and matures. In that way, they aren't any different than us. Cass County Soil Conservation District 1665 43rd St S, Suite103 Fargo ND 58103-3319

STEWARDSHIP FOR TODAY & TOMORROW

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