



CONSERVATION CONNECTION

A report of Minnehaha Conservation District

Conservation Connection

*A publication of the Minnehaha
Conservation District*

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Sioux Falls, SD 57104

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 <http://minnehahacd.org>

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The Minnehaha Conservation District Board of Supervisors meets on the second Monday of every Month at 3:00 pm. Meeting times are subject to change. Visit our website for exact dates and times: <http://minnehahacd.org>.

All programs and services of the US Department Of Agriculture, Natural Resources Conservation Service, and the Minnehaha Conservation District are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap.

ABOUT THE DISTRICT

Minnehaha Conservation District was created in 1941 to Administer resource conservation within the boundaries of Minnehaha County in southeastern South Dakota. The District is self-governed and has the authority to enter into working agreements with government agencies and private citizens to carry out its purposes.

ACCOMPLISHMENTS IN 2019

- ▶ 35 acres of trees were planted for farmsteads, feedlots, field windbreaks, and wildlife habitats.
- ▶ The survival rate for new plantings was 93%!
- ▶ 69 producers/landowners participated in grass seeding throughout Minnehaha County, seeding alfalfa, cool season grass, native grass and cover crops.
- ▶ We sold \$29,635.80 (7,697 trees) in hand plants.
- ▶ We continued a partnership with the City of Sioux Falls for dispersal of bio-solids and soil sampling.
- ▶ Outreach and legislative efforts included our website, National Ag Day, a booth at the State Fair, Sioux Empire Farm Show, Central Big Sioux River Watershed project, State technical meetings, and our annual tree flyer.
- ▶ Educational activities included the 26th Annual Sioux Empire Water Festival (area 4th graders), land judging contest for FFA students, Earth Team volunteers, state speech contest, Arbor Day contest, and Dewey C. Gevik Outdoor Conservation Learning Area.

SERVICES OFFERED BY THE MINNEHAHA CONSERVATION DISTRICT

- Tree plantings for shelterbelts, windbreaks, and wildlife plantings (machine only)
- Fabric Installation
- No-till drill seeding of soybeans, alfalfa, oats, wheat, and rye
- Native grass seeding, tree rows, waterways, pastures and yards
- Food plot seeding
- Terrace seeding
- Grass seed available
- Tilling for tree planting or grass seeding preparation

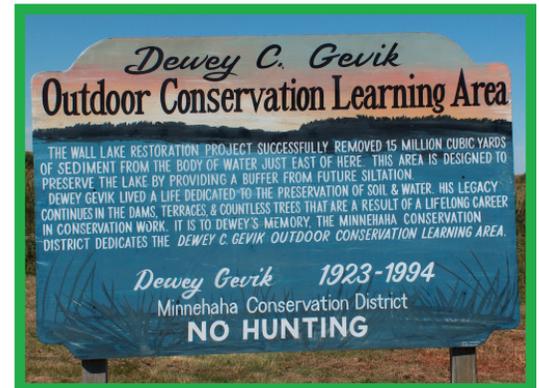
MAINTENANCE OF WEED BARRIER

Keep the edges and ends of weed barrier fabric covered with soil as wind, frost, and rain may cause the fabric to shift. When the fabric isn't anchored properly, it can be harmful to the tree. Also, check the older plantings as it may be necessary to make the opening around the base of a tree larger. If the opening is not large enough, the fabric will tighten around the trunk base and may cause damage or kill the tree or shrub (this is called girdling). When cutting the opening in the fabric larger for the growth of the tree, care should be taken not to harm the base of the plant!

Some weeds and grasses will emerge adjacent to trees. It is important to walk the tree rows two to three times during the growing season to pull weeds and grasses growing near the trees. If weeds grow tall enough to compete for light and fall over fabric and trees, some type of weed control would be necessary.

DEWEY C GEVIK OUTDOOR CONSERVATION LEARNING AREA

The Gevik Learning Area makes possible an interpretive educational experience that is open to the public, featuring several conservation practices such as the restoration of a wetland, grassed waterway with a rock weir structure, rock crossings, shelterbelts, native grass plantings, and hiking trails. Located just one-half mile west of Wall Lake, the Learning Area showcases natural resources at their finest while also filtering the water flowing into Wall Lake. Three walking trails offer access to all the diverse environments, and ninety-four species of birds have been documented by bird watching clubs. Observation decks have been constructed so people can relax as they enjoy watching wildlife in their natural habitat.



The Minnehaha Conservation District has been honored to manage and maintain the Learning Area for the public. We would like to further enhance the Learning Area by installing descriptive signs of native grasses and tree species, building bird houses, and distributing informative brochures to build public awareness of this beautiful area just west of Sioux Falls.

Photos: Brian Scott and Mick Zerr

WINDBREAK RENOVATION

As windbreaks and shelterbelts age, it is wise to evaluate the overall condition of the windbreak to see if it still meets the objective of why it was originally planted. Many things can happen to a windbreak as it ages. The density can be reduced due to dead or unhealthy trees. Sod-forming grasses can become a problem as they take water and nutrients away from the trees. Shrubs or small trees can start growing in the understory, creating various problems.

Most windbreaks are planted to provide protection from cold winter and hot summer winds, to provide adequate snow distribution, to provide wind erosion control, to provide habitat for wildlife, or to provide a screen from neighbors or heavily traveled roads. If any of these objectives are no longer being met or only partially met, then it may be time to think about renovation of that windbreak.

There are three basic techniques of windbreak renovation as it involves tree removal and replacement. The first method is to remove the entire windbreak and replant it. The second method is to remove one or more complete rows of the windbreak. The third method is to thin or remove individual trees. These last two methods may or may not involve replanting trees to replace the trees removed.

Renovation technique 1 exposes the entire area needing protection, but does allow for repositioning of the windbreak to a better location. Technique 2 can thin an over-crowded windbreak and stimulate growth and increase vigor of the remaining trees. Growth in the middle and upper levels of the windbreak is given a chance to increase. Technique 3 helps strengthen remaining trees by removing dying or unhealthy trees.

One universal problem in most windbreaks needing renovation is the presence of sod-forming grasses. A general rule is that if 50 percent or more of the windbreak's undergrowth is made up of sod-forming grasses or broadleaved weeds, chemical weed control is needed. Mechanical weed control often times is not feasible as the tree crowns are close to each other and/or the tree roots can be disturbed.

If you need assistance with evaluating your windbreak or shelterbelt for renovation, please contact our local conservation district office located at the USDA Service Center in Sioux Falls.

Big Sioux River Watershed Seasonal Riparian Area Management (SRAM) Project Application

NAME: _____ PHONE #: _____ EMAIL: _____

ADDRESS: _____

LEGAL DESCRIPTION: _____ ESTIMATED ACRES: _____

Note: Attach an air photo or similar map and indicate which acres of land are to be enrolled. If there is more than one tract of land to be enrolled, **please fill out another form.**

By signing this form I understand that:

- ▶ This application is subject to the approval of the Big Sioux (BS) Watershed Coordinator and the Moody County Conservation District (MCCD) based on project priorities (**You must get prior approval for any and all work planned in order to be eligible for cost-share**)
- ▶ Marginal pastureland within the 100-year floodplain immediately adjacent to Skunk Creek will be eligible for the SRAM program. Enrolled acres shall not be grazed April 1 through September 30.
- ▶ Payment is **\$70-\$90 per acre** and 75% of actual cost for additional approved supporting practices if applicable. Alternative water shall be provided if grazing is carried out October 1 through March 31.
- ▶ Haying will be allowed through the summer months and bales should be removed before inclement winter weather prevents removal which at no time shall be later than November 15th. Haying cannot begin until after June 15th.
- ▶ **For more info contact Barry Berg at 605-759-2650**

APPLICANT SIGNATURE: _____ DATE: _____

2020 ORDER FORM

Minnehaha Conservation District
2408 E. Benson Road
Sioux Falls, SD 57104-7018
PHONE: 605-330-4515, ext. 3
EMAIL: info@minnehahacd.org

Date _____
Customer _____
Billing Address _____
City, State & Zip _____
Phone _____
E-mail _____



Please Note: Bare Root and Machine Planting Orders are due by March 2, 2020. Trees ordered after March 2, 2020 are subject to availability.

NO WARRANTY ON TREES - \$3.85 per tree or (bundle of 25 - same species - \$86.00 - NO WARRANTY ON TREES

QTY.	BARE ROOT SHRUBS	HT.	COST	QTY.	BARE ROOT TALL TREES	HT.	COST	QTY.	MISCELLANEOUS PRODUCTS	PRICE	TOTAL
	Almond, Russian 'Regal'	5'			Aspen, Quaking	45'			WILDFLOWER MIX - Prairie Grass & Wildflower	\$40.00	
	Aronis 'McKenzie'	8'			Buckeye, Ohio	30'			(Covers approximately 1,000 sq. ft.)		
	Buffaloberry	12'			Catalpa, Northern	50'			FLAGS (100 per bundle)	\$15.00	
	Caragana	14'			Cherry, Black	50'			WEED BARRIER - 4' x 4' Sq. (includes 5 staples)	\$4.50	
	Cherry, Mongolian	7'			Cottonwood, Northwest	80'			WEED BARRIER - 6' x 500' roll	\$220.00	
	Cherry, Nanking	7'			Cottonwood, Seedless	80'			WEED BARRIER - 6' wide	\$0.65/ft.	
	Cotoneaster, Peking	8'			Elm, American	50'			8" FABRIC STAPLES	\$0.20/ea.	
	Cranberry, American Highbush	10'			Hackberry	55'			8" FABRIC STAPLES - Box of 500	\$67.00	
	Currant, American Black	5'			Honeylocust	50'			TREE SHELTER	\$4.50/ea.	
	Dogwood, Red Stemmed	7'			Kentucky Coffee Tree	75'			STAKES	\$2.00/ea.	
	Elderberry, Common	15'			Linden, American (Basswood)	60'			PLANT PRO-TEC Garlic Sticks 25 sticks	\$28.00	
	Hazelnut, American	15'			Linden, Little Leaf	40'			(discourages deer & rabbits from browsing trees & shrubs)		
	Honeysuckle	8'			Maple, Freeman	50'			PLANTSKYDD - 1 lb. box powder concentrate	\$29.95	
	Indigo, False	8'			Maple, Silver	60'			PLANTSKYDD - 2.2 lb. box powder concentrate	\$49.95	
	Juneberry	15'			Oak, Bur	30'			PLANTSKYDD - 1 lb. granular	\$12.95	
	Lilac, Common	12'			Poplar, White	40'			PLANTSKYDD - 3 lb. granular	\$26.95	
	Lilac, Late	10'			Walnut, Black	50'			PLANTSKYDD - 7 lb. granular	\$44.95	
	Rose, Hansen Hedge	5'			Willow, Golden	40'			PLANTSKYDD - 1 qt. pre-mixed spray	\$21.95	
	Seaberry	15'							PLANTSKYDD - 1.3 gal. pre-mixed spray	\$59.95	
	Sumac, Smooth	10'									
	Sumac, Skunkbush	8'		QTY.	BARE ROOT CONIFERS	HT.	COST			Subtotal	
	Willow, Sandbar	10'			Pine, Ponderosa	75'				Sales Tax (4.5%)	
					Red Cedar, Eastern	50'				TOTAL PAYMENT	
					Spruce, Black Hills	50'					
					Spruce, Colorado Blue	50'					
QTY.	BARE ROOT MEDIUM TREES	HT.	COST								
	Cherry, Pin	30'			LARGE POTTED CONIFERS - Price is \$22.00 per pot						
	Chokecherry	24'			15" Black Hills Spruce	50'					
	Chokecherry, Amur	25'			15" Colorado Blue Spruce	50'					
	Chokecherry, 'Schubert'	24'									
	Crabapple, Midwest	30'									
	Crabapple, Red Splendor	30'									
	Crabapple, Siberian	30'									
	Maple, Amur	20'									
	Mulberry	24'									
	Olive, Russian	20'									
	Pear, Harbin 'McDermid'	15'									
	Plum, Native	18'									
	Plum, 'Prairie Red'	18'									
	Viburnum, (Nannyberry)	30'									
	Willow, Laurel Leaf	40'									

METHOD OF PAYMENT:
 ___ Cash ___ Visa ___ MasterCard ___ Check # _____
 Card no.: _____ - _____ - _____ - _____
 Exp. Date: ___ / ___ / ___ CVC Code: ___ ___ ___

Payment is due at time of order.

VIEW TREE SPECIES AT:
<http://www.minnehahacd.org>
We design shelterbelts!
Call 605-330-4515, ext. 3
or email: info@minnehahacd.org

Ht. = maximum height at 20 yrs.

Shelterbelts are one of the most important landscape features we can have or use in the state of South Dakota. Without them the wind and snow we get can really take a toll on everything from our farm yards, acreages, livestock, wildlife, crops and our soils. Without them there isn't much structure to slow the effects of the wind and snow. Evaporation of necessary moisture from your field or garden, snow piling and melting in unwanted places, blocking an eyesore or road noise are all good reasons for considering a shelterbelt. Knowing we live in a relatively flat state, we don't have much natural terrain to slow the wind and snow. If we want to be good stewards of the land, we need to plant some trees to protect our property and this wonderful state we call home. I encourage you to ponder some of these ideas when planning to protect whatever it is your trying to keep out of the elements.

It is very important to decide what your main concern is. Shelterbelts can serve more than one purpose and remember something is better than nothing. Even a couple rows can significantly lower the effects of the wind and snow if placed in the correct locations. Are you more concerned about protecting your house or cattle yard? Or do you want to attract wildlife or simply provide some natural beauty to your yard or field?

I would say the number one reason I am approached by customers is they are looking to protect their house and or yard. Some benefits of a residential shelterbelt are they make life more pleasing when you are outside on windy day. They keep the snow away from your house or driveway and save some money on your heating bill in the winter. Studies have shown that if wind is reduced you can significantly reduce the amount of home fuel used on a yearly basis. When it comes to the design, each property must be looked at to maximize the efficiency. In a perfect world people would all have enough room to leave a couple hundred feet between the shelterbelt and what they are trying to protect. As for the number of rows I truly feel like the more the merrier. Now, I'm not saying everyone needs to plant 10 rows but we all can look around this winter and see that more snow is held in those belts with multiple rows than the ones with one or two. I have seen some great shelterbelts of only a few rows functioning very well but would have been more effective with a couple more rows. I would recommend 5 rows at minimum as a primary windbreak for your farm yard or acreage planted on the North and West of your property. Starting with smaller shrubs and trees toward the windward side and going with a taller species in each row as we work towards whatever you are trying to protect. This provides you with good snow blockage in the

first couple rows of shrubs. You would then put some taller species in to get the wind lift you need to carry the winds up over your house or yard. Then you can finish on the inside with something a little shorter that looks beautiful from the inside and will hold up any residual snow that might sneak by the first couple rows. This same principal is used in almost any shelterbelts that you would want to plant. Keeping the south side of the property more open, possibly one or two shorter rows is all to allow the cool summer breezes in.

Studies have shown that if wind is reduced you can significantly reduce the amount of home fuel used on a yearly basis.

Protecting livestock is another great use of a shelterbelt. Without them the livestock can really be stressed in the middle of our hard winters or hot summers. Planting as little as 3 rows can greatly reduce the velocity of the wind and trap snow. The amount of space is usually the determining factor when deciding how many rows are needed. Increased weight gains, increased feed efficiency and greater survivability can really increase your profits at the end of the day with a well planned out shelterbelt. Normally we plant shelterbelts to the north and west of what we are trying to protect. Keep in mind when it comes to protecting a feedlot or calving ground, it's not a bad idea to plant something to the east and or south to protect from the spring snow and ice storms during calving season.

Field windbreaks are also a good idea. In South Dakota we have some winds that can really be hard on crops. I can't think of any crop that wouldn't benefit from some degree of protection from the wind. With some trees you can help provide snow dispersal over your field, help slow or eliminate the wind from blowing over your crops before they are ready for harvest and in the end improve your yields and bottom line.

Living snow fences are another great function for a shelterbelt where you are trying to keep snow off roads. We all know of a few spots where a living snow fence could be put to good use and keep those big drifts in the fields and off the road and in turn keeping us all safe. Trees are a better option than a manmade system. They don't need to be assembled and taken down each year and have a way longer life span than a snow fence. I have seen some great improvements on some roads and driveways that used to be impassable after a decent snow that now

CONSIDERATIONS WHEN PLANNING A SHELTERBELT CONTINUED...

don't even require a plow to clean.

Wildlife is the last thing that I will mention that greatly benefits from shelterbelts. With the efficiency of all the farming equipment and the tight budgets of today's farmers, there isn't a lot of habitat left on the landscape for these species to thrive like they once did years ago. Without habitat we lose a lot of the insects that are critical to the pollination of many species of plants, trees, and crops along with all the game animals that provide us sustenance for our families and income to our state. These shelterbelts need a little different thought process though. Most shelterbelts hold and stop all the snow so they can protect something else. When it comes to wildlife there needs to be enough rows to stop the snow in the first half of the shelterbelt so the animals can make a home in the inside rows or the downwind side. A perfect scenario would have a minimum of 8 rows with the row spacing being

slightly further apart than any of the other options I mentioned above. I have seen places that have transformed from a crop field or a pasture not being utilized to a wildlife haven after a couple years of having a wildlife shelterbelt added to the property. Many of us grew up hunting and fishing and remember how good things were years ago. Now places are getting more difficult and harder to find that harbor animals for the great pastime of hunting we once enjoyed all over the state. Anyone of us can simply take an acre or two and plant some trees and provide crucial habitat for all species of animals while satisfying the desires of the outdoorsman in our area. There simply isn't anything more fulfilling than planting some trees to help the environment, ourselves and our property while providing habitat for all the wonderful species we co habitat with in our amazing state we call home.

SHELTERBELT BENEFITS	<i>They act as windbreakers.</i>	<i>Can cut your heating bill.</i>	<i>Good snow blockers.</i>	<i>Protects Livestock.</i>	<i>Creates habitat for wildlife.</i>
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LOCAL LAND COVER CROP

The Minnehaha Conservation District partnered with Carl Eliason for the second year along with 4 other producers in Minnehaha County, South Dakota Soil Health Coalition members and farmers in the area., to plant and showcase cover crops. this last August through October. Eliason provided roughly a 1/2 acre of space at the edge of one of his fields for the project. A field where rye had been combined off in late July. The area which would become the demonstration plots was then sprayed once on July 23 in preparation.

Seed for six different mixes was donated by a local company and was seeded into 100' by 50' plots on August 2nd. When asked what the goal of the demonstration plot project was for the Conservation District, District Manager John Parker said, "To increase awareness of the different cover crop species, their potential growth in this part of South Dakota, and the benefits they can provide to producers in the surrounding area."

“The one who plants trees, knowing that he will never sit in their shade has at least started to understand the meaning of life.

-Rabindranath Tagore

In order to accomplish this goal a Cover Crop Mix Demo Plot Tour was then held on September 19th to showcase visually the different mixes, their relative growth during the growing season, and to compare what the different components of each mix can provide as far as soil health and grazing benefits. Representatives from the Minnehaha Conservation District, Natural Resources Conservation Service, Big Sioux Watershed Project, Millborn Seeds, the SD Soil Health Coalition were present to interact with those who stopped by and explain some of the many benefits that can be achieved when utilizing cover crops. For more information about this set of cover crop plots, specific mix composition or the benefits of cover crops please contact John Parker at (605) 370-3480, mcdjohn78@gmail.com or the SD Soil Health Coalition at (605) 280-4190, sdsoilhealth@gmail.com.

CRP SIGNUPS NUMBER 54 (GENERAL ENROLLMENT) AND CRP CONTINUOUS ENROLLMENT

General CRP:

Signup period is **Dec. 9th, 2019 through Feb. 28th, 2020** The general CRP signup is a competitive enrollment of environmentally sensitive agricultural lands. You will be required to establish a conservation cover on your land to control erosion, improve water quality and develop wildlife habitat. These could be approved grasses, forbs, and or trees and shrubs depending on the practice you sign up for. FSA will provide you with rental payments and cost-share assistance to help get the practice established. The general sign up is competitive and your offer will go thru a ranking process to determine a point value for environmental benefits to help determine which sites will be offered a contract. Some of these points awarded will be in your control such as if you are willing to seed native and forbs versus introduced cool season grasses to being willing to accept a lower rental rate. Your Environmental Benefits Index (EBI) will be fully explained to you when you come in. Planting or establishing the highest scoring cover mixture is the best way to improve your chances of offer acceptance. Please call the office to set up an appointment- Shelli at FSA would be the main contact person but Mary Lou and Casey in the NRCS office will be happy to help answer any questions about CRP. Annual rental rates are set at 85% of the existing rates. Your rates will be explained to you upon application. There is cost share to help pay for the land to be seeded. Note: We will determine if you as owner or operator are eligible and if the land you are offering is eligible (was it planted or considered planted to an agricultural commodity crop four of the six years from 2012 to 2017).

Continuous CRP:

Similar land ownership (operator) requirements and dates of cropping as the General CRP signup. One main difference here is that and it is not competitive and no EBI is calculated. The areas to be offered must meet the requirements of the practice. Eligible practices include grassed waterways, filter strips, Riparian Buffers, Windbreaks and Shelterbelts, Living Snow Fence, Duck Nesting Habitat, Pollinator Habitat, Farmed Wetlands Program constructed wetland, etc. We will be happy to evaluate the site to see if a continuous practice is needed and feasible on your site. These annual payments are set at 90% of the existing rate. There is cost-share assistance to establish the practice and the ground cover. These practices may require a full design to be built correctly. These designs will be provided to you. In addition, a Signup Incentive Payment of 32.5% of the first full year annual rental payment is paid at contract approval on all newly enrolled Continuous CRP contracts and a 5% Practice Incentive Payment is paid for installing the practice. Please make an appointment with Shelli at FSA or come into the office and we will be happy to answer questions you may have.

MARK YOUR CALENDARS! BRING THE WHOLE FAMILY!

South Dakota's Celebration of National Agriculture Week - March 28, 2019

Saturday, March 28th is Agriculture Day at the Washington Pavilion in Sioux Falls, South Dakota. All are welcome to join in the fun of three packed floors of all things agriculture in South Dakota and stay for the free lunch. There is free admission to Kirby Science Discovery Center and the Visual Arts Center as well. This educational and exciting program starts at 10:00am and goes thru 2:00pm. Ag Day gives children and families a wonderful opportunity to learn about agriculture's significance – in South Dakota and beyond. Our exhibits are exciting, educational hands-on activities – great for the whole family! A free lunch is offered, featuring South Dakota-made products. For more information go to *INTERESTING SOIL FACTS*: pavilionagday.org

- ▶ Soil is living.
- ▶ There are more than 70,000 types of soil in the United States.
- ▶ One tablespoon of soil has more organisms in it than people on earth.
- ▶ The very best China dishes are made from soil (Kaolin, a type of clay).
- ▶ It can take more than 500 years to form one inch of topsoil.
(This is being challenged with using soil health practices!)
- ▶ Nearly all antibiotics used to fight our infections are obtained from soil organisms.
- ▶ In one gram of soil, there are over 5,000 different types of bacteria.





Minnehaha Soil Conservation District
2408 E. Benson Road
Sioux Falls, SD 57104-7018

Phone: 605-370-3480

Check out our website: <http://minnehahacd.org>

To view **TREE SPECIES** or **DOWNLOAD AN ORDER FORM**
visit our **WEBSITE** at: ***<http://minnehahacd.org>***
