

ROOT RIVER SWCD CONSERVATION HIGHLIGHTS

A MESSAGE FROM THE DISTRICT MANAGER

NOVEMBER 2020



Welcome to the Root River SWCD Conservation Highlights 2020. Inside this newsletter you will find exciting articles ranging anywhere from conservation planning, cover crops, perennial cover and this year's tree order form.

With the cooperation of Mother Nature this has been one of the best construction seasons in the last 5 years. With the installation of many practices including miles of grassed waterways, terraces, several grade stabilization structures, thousands of acres of cover crop, manure storage facilities, hundreds of acres of

native grasses and forbes, stream bank protection fish habitat improvement, hundreds of acres of timber stand improvement and removal of invasive species, there have been a wide array of practice implemented this year.

I would like to thank all the landowners and producers of Houston County for all their conservation minded ethics and the many years of installing best management practices to help protect our ground and surface waters along with enhancing our wildlife areas.

*Dave Walter
District Manager*

Conservation Practices



Soil conservation is the best way to make sure that we have the land we need to live on. Soil conservation measures should aim at preventing or at least minimizing soil loss and water pollution.

In 2020, the Root River SWCD helped landowners install grassed waterways, grade stabilization structures, diversions and terraces. By installing these conservation measures landowners are helping to prevent soil loss and water pollution. Soil loss is a process that involves the wearing away of the topsoil by loosening soil particles and blowing or washing them away. This soil ends up in the valley and faraway lands or is washed to the rivers and streams causing water pollution.

Root River SWCD has funding available to landowners to help install conservation practices on their property. If you have any conservation concerns or questions please call the Root River SWCD for technical advice.



INSIDE THIS ISSUE:

<i>Push-Up Pond & Pond Clean Out Programs</i>	2
<i>Cover Crop Management</i>	3
<i>Conservation Recognition</i>	4-5
<i>Watershed Conservation Planning Initiative</i>	6
<i>Bd. Supervisor Retires</i>	7
<i>Groundwater Movement</i>	7
<i>Conversation About Conservation</i>	8
<i>Conservation Trees</i>	8
<i>2021 Tree Descriptions</i>	9
<i>2021 Tree Order Form</i>	10

Root River SWCD

Office Location:

805 N. Hwy. 44/76, Suite 1
Caledonia, MN 55921

HOURS

7:00 a.m. - 4:30 p.m.

Monday—Friday

(507) 724-5261 ext. 3

[https://
www.co.houston.mn.us/
departments/soil-and-water/](https://www.co.houston.mn.us/departments/soil-and-water/)

STAFF

Dave Walter, Manager
Bob Scanlan, Assistant Manager
Janice Messner, Admin Asst.
Dan Wermager, Technician
Jean Meiners, Technician

BOARD OF SUPERVISORS

Glenn Kruse, Chair
Cecil Graf, Vice Chair
Roger Stenhoff, Secretary
Matt Feldmeier, Treasurer
Jerry Welke, Reporter



Push-Up Pond and Pond Clean-Out Programs Remain Popular



New Push-Up Pond with 6" PVC Pipe



New Push-Up Pond with No Pipe

In 2020, Root River SWCD re-introduced their pond clean-out program, while also continuing to administer their popular push-up pond program. Both programs are funded through the local county water plan, and the demand for these programs exceeds the funding.

Push-up ponds are simple projects, where the fill material to build the dam is pushed-up on site with a bulldozer. This saves time and money, and produces a pond that will hold 10 years of sediment load or more. While not as heavy-duty or durable as our larger grade stabilization structures, these are quick and easier to build. No clay material needs to be brought in with a scraper from a borrow area (often in a field), which is attractive to some landowners. However, there are parameters that must be met. They include: drainage area must be less than 20 acres; 10 years of sediment storage (about 5 -5.5 ft. pool depth); 3:1 front slope; 2:1 back slope; 8 ft. top width; 10 ft. x 30 ft. emergency spillway; seed and mulch.



Pond Clean-Out Using an Excavator



*Pond Clean-Out & Rep
Using a Bulldozer*

Pond clean-outs are another straightforward program. The goal is to simply clean out the sediment that has accumulated in the pool area of older ponds. This way the existing pond can function properly again by slowing down runoff water and trapping sediment from upland areas. The best sites for this program are ponds that no longer hold any water, or are currently holding very little water (a few inches or less). This way we can get right to work, or if we have to drain the pond, it will be dry enough to finish the job later that summer. The easiest method is to push the dry sediment out with a bulldozer, but if it is still too wet, an excavator can be used. If the dam has been breached from the pond over-topping, it will of course be fixed after the pool is cleaned-out.

Both programs have incentive payments that are flat rates, as opposed to a certain cost-share percentage. This makes things simpler, as no bills, receipts, or bids need to be turned in to us. The payment for push-up ponds is \$600 for a pond without a pipe, and \$1,000 for a pond with a pipe. The payment for a pond clean-out is \$400. Both programs are on a first come, first serve basis. There is currently a waiting list, and we are contacting people when funding becomes available. To make things fair, we are limiting these to one push-up pond and one pond clean-out per landowner per year. Call the SWCD office if you are interested and would like to be put on the waiting list.



Benefits of Cover Crop Management

We're nearing the end of harvest here in Houston County and most, if not all, soybeans are in the bin while dry corn harvest is well underway. Corn silage and high moisture corn have been stored for winter feeding as producers have been blessed with a pretty decent harvest season. Many producers have added an additional crop to their system in the form of a cover crop. Cover crops are grown for conservation purposes and if managed over a long enough time, can add value to a cash crop or livestock operation. For those who have limited experience with cover crops there are some management practices to consider, but the long term benefits many times out-weigh the added cost to an operation.

Management Practices to Consider While Implementing Cover Crops:

Herbicide carry-over. Be sure to look at your herbicide label and note potential impacts on cover crops. What is the $\frac{1}{2}$ life of the chemical? Many times fall-seeded cereal grain cover crops are seeded after times of herbicide carry over depending on the chemicals in your mix but some have an 18 month residual. Are you planning to inter-seed into standing cash crop? Early season inter-seeding takes additional management and timing to introduce a cover crop in the middle of the growing season, but late season inter-seeded cover crops such as those that are aerial broadcast or seeded with a high boy are past many of the herbicide carry-over timelines. Needless to say, herbicide use and carry over are a management concern.

Termination. Be aware that fall seeded cereal cover crops such as rye are very resilient and are bred to over-winter with ease. They tend to commence growth early the next spring and build a lot of biomass by mid to late May. With that said, planning your cash crop planting and cover crop termination are things to keep in mind. Are you no tilling? Many times you can no till your cash crop into standing rye or wheat then come back and terminate the cover crop at a later date while integrating your typical herbicide program. There again, timing and herbicide management is a key issue when thinking about the next cover crop, mid to late into the next growing season.

Livestock Integration. Are you a livestock producer? Is manure application during the fall and winter a requirement of your operation? Sequestering nutrients such as nitrogen is a great reason to transition cover crops into your operation. Keeping the N available for next year's cash crop may be a considerable cost savings. With that said, cover crops can only do so much. If applying manure onto a fall seeded cover crop make sure over application of manure doesn't smother out the crop. A couple of light applications is better than one heavy application. Timing of applications are helpful as well. Avoid manure applications on cover crop during wet times and right at germination. Both can be detrimental to a young cover crop.

Benefits of Implementing Cover Crops as Part of a Soil Health Improvement Plan

Better Soil Infiltration – Improvements in soil health through the use of cover crops and no-till have been proven to enhance infiltration of water during rain events. Not only do deep rooted cover crops break up the "plow pan" but increases in soil organic matter over time improve the soils ability to hold water. An increase of 1% in your soil test OM has the potential to infiltrate an extra inch of rain during heavy rain events. Producers implementing soil health practices see drier fields in the spring for earlier planting and increased plant available water during dry periods of the year. This past August was a good reminder of how beneficial it is to improve infiltration of rain water to be stored for plant use later in the growing season as those fields showed less plant stress due to the dry weather.

Erosion Control – By adding cover crops to your rotation, one can expect to see less erosion due to water or wind. Not only does the above ground cover crop provide armor for the soil, below ground the roots help hold the soil thereby reducing sediment and phosphorus loading into nearby waterways and streams.

Nitrate Reduction – Cover crops are a good user of nutrients thereby binding those nutrients, namely nitrogen from being leached downward into the soil profile. This N is then made available to next year's cash crop after burn down.

**For more information on cover crops contact Bob Scanlan at the
Root River SWCD.**



*2020 Root River SWCD
Conservationist of the Year*

The Larry Ledebuhr Family

The Root River SWCD is proud to announce this year's Conservationist of the Year, the Ledebuhr family. They produce crops and beef. Their family consists of Larry and Carmel along with daughter, Andrea, and her husband, Jesse Sylvester, who live in FL. Son, Mark Ledebuhr, works on the farm in Mound Prairie Twp. along with his girlfriend, Reba.

The Ledebuhrs own a mix of wooded, pasture and cropland acres. They also rent additional cropland acres. The original farm was purchased in the early 1950's by Larry's father and grandfather. Over time additional acres were purchased and improvements made by the current family. Diversification of agricultural products has been their focus over the years. The current operational focus is raising beef, grain, hay and timber. The managed land is a mix of valley and ridge-top acres that drain downstream into the Root River Watershed.

The varied landscape of their farm includes everything from highly erodible land on the hillsides to wetland conservation areas in the valley. Many of the county's Karst area are unique when compared to most areas of the state. The Karst geology of southeast MN, known for its shallow soil overlying limestone rock, is vulnerable to groundwater contamination due to land uses on the soil surface. The Ledebuhrs are conservation-minded and extremely proactive while implementing conservation practices that protect our vulnerable natural resources as they produce their agricultural commodities. What sets the



Ledebuhrs apart is their way of continuously finding ways to use best management practices to preserve the most vulnerable areas of their farm while looking for ways to diversify and improve their farming operation.

The Ledebuhrs employ many conservation practices that are common in the county, while implementing a diverse agriculture production business. On their managed acres, you'll find many of the crop production acres employ contour strips, grassed waterways and push-up ponds along with larger grade stabilization structures. All of these practices include the management needed to ensure that the practices continue to do their job into the future.

One of the larger conservation projects on the farm includes a grade stabilization structure that was built in 2005. This project included funding through NRCS EQIP program. It allowed for improvements both on the Ledebuhr property and to downstream neighbors. This improvement provides reduced flood potential and sediment flow to downstream areas, while providing an abundance of wildlife habitat. The structure is approximately 28 ft. tall with a 24 ft. wide top and includes a 5 acre pool area with a 1,000 acre drainage area.

In addition to reducing erosion through structural practices, Ledebuhrs have been using cover crops since the 1990's. Cover crops provide a soil covering during times when a commodity crop is not being grown. A typical cover crop of rye will follow soybean harvest in September/October. In addition, a multispecies cover crop is seeded following an oat harvest in July/August.

On their wooded acres, the Ledebuhrs have implemented timber stand improvement strategies that reduce the negative effect of invasive and non-crop trees while improving the woodlands for commercial timber harvest. They have also improved their cattle pasture by removing invasive brush species such as multiflora rose, honeysuckle and buckthorn. By reducing the invasives they have improved the forage production on their grazing acres.

Livestock has always been an integral part of the Ledebuhr family farm. Over the years the family has raised many types of beef cattle, sheep and cervidae (deer). The current beef herd includes the Buelingo breed but has also included Belgian Blue and Piedmontese as well as cross breeds. Interestingly, Ledebuhrs have enjoyed their share of success in the beef show ring, having won championships at the American Royal and World Beef Expo shows for their prize-winning Belgian Blues. Belgian Blue cattle are known for their tasty and tender meat but with a low fat content. They have extreme muscling due to a naturally occurring mutation known as "double muscling". Another less common livestock specie having inhabited the Ledebuhr farm was whitetail deer. The family built the requisite 8 ft. deer fence around 15 years ago and bred deer that were used for outfitter hunting as well as antler development and sales. Due to the increase in CWD the family decided to step away from the deer business but continue with the purebred beef herd.

It is through their willingness to change and improve commercially and through excellent conservation practices that the Ledebuhrs will continue their farming operation into the future.



Watershed Conservation Planning Initiative Continues

For the last two years, technicians at the SWCD office have been working with the Root River Watershed Conservation Planning grant. They've been doing targeted outreach to landowners in two priority sub-watersheds within the Root River watershed. These two sub-watersheds are Torkelson Creek in Fillmore County, and Money Creek in Houston and Winona Counties. If the landowner is interested, technicians meet them on their property and walk the property. They look for any resource concerns, things like active gully heads, ephemeral gullies, sheet and rill erosion, compaction, soil organic matter depletion, over-grazing, invasive plants, lack of quality wildlife habitat, etc. The technicians will discuss with the landowner options for projects that can fix these problems. Most of the time these projects are things like ponds, grassed waterways, diversions, terraces, no-till, cover crops, contour strips, brush management, or prairie habitat establishment. If the landowner so chooses, our office will write a conservation plan for their farm that lays out the projects that they want to do. Then we can sign them up for financial assistance and get these projects done. If the landowner does not want to do a project at that time, there is zero consequence. Most of the time we are just giving them ideas.

A good example of this process is a recent project that occurred in the Money Creek watershed. Our office contacted a landowner who rarely worked with us, and went through the entire conservation planning process with him, and got a project funded and completed. We called Jim (the landowner) in early spring. He invited us out to walk his property with him. His property was mostly forestland, so there were no erosion problems to tackle. However, we did find large patches of Common European Buckthorn throughout the woods. This invasive shrub was taking over; erasing diversity and ruining wildlife habitat as it spread. Jim wanted to do something about this, so we worked with a DNR forester to complete a forest management plan that focused on buckthorn eradication. It gave technical details on how and when to spray and effectively kill the buckthorn, and where the patches of it were located. We wrote a conservation plan based on this, which split the project into three areas that were scheduled to be completed within three consecutive years. Once we had the conservation plan written and laid-out, we showed it to Jim. He pulled the trigger on the plan and signed up for Environmental Quality Incentive Program (EQIP) financial assistance. The EQIP ranking period was the following week, so it was a quick turnaround and Jim's project was chosen for funding. The following fall, Jim and his family got started on spraying the buckthorn, and already have two of the three patches treated. They've received an EQIP payment for each patch as they were completed. Follow-up treatments will be needed in order to catch any shrubs that they may have missed the first time, but these will go much quicker.

This is a great example of the conservation planning process. We got to know the landowner and his land and found a practice that fit what he already wanted to do on his property. It was a successful EQIP application, and the landowner is pleased and is doing good work. We look forward to doing many more projects like this.

Also, this is a good example of a practice that our office might not be known for. Sure, our bread-and-butter practices are things like ponds, grassed waterways, and cover crops, but we want to get the word out that we also do habitat work outside of cropland. We can help woodland and pasture owners with eradicating invasive buckthorn, honeysuckle, multi-flora rose, garlic mustard, etc. We can also help with establishing native prairie habitat. Financial assistance is available for all of these, just like with our ponds and grassed waterways. If you are a landowner who is interested in having us walk your property and give you ideas for potential projects, don't hesitate to give us a call.



Dead buckthorn that Jim has sprayed



*More dead buckthorn
The basal spray method was used*



Root River SWCD Bd. Supervisor Retires After 8 Years of Service

The Root River SWCD recently honored Roger Stenhoff for his eight years of service as a Root River SWCD Board Supervisor. Stenhoff, of Spring Grove Township, represents District 3 which includes Black Hammer Township, Spring Grove Township & Village and Wilmington Township. Roger has served as the board secretary, treasurer, reporter, vice-chair, chair and served as the SWCD's representative on the Hiawatha Valley RC & D committee. Since 1939, when the Root River SWCD was established, there have been seven supervisors (plus an additional three that completed others' terms) for District 3.

Houston County is divided into five districts. Through the general election process Root River SWCD board supervisors are obtained. They serve a four year term and have the opportunity serve consecutive terms with no limit to the number of terms they can serve upon re-election.

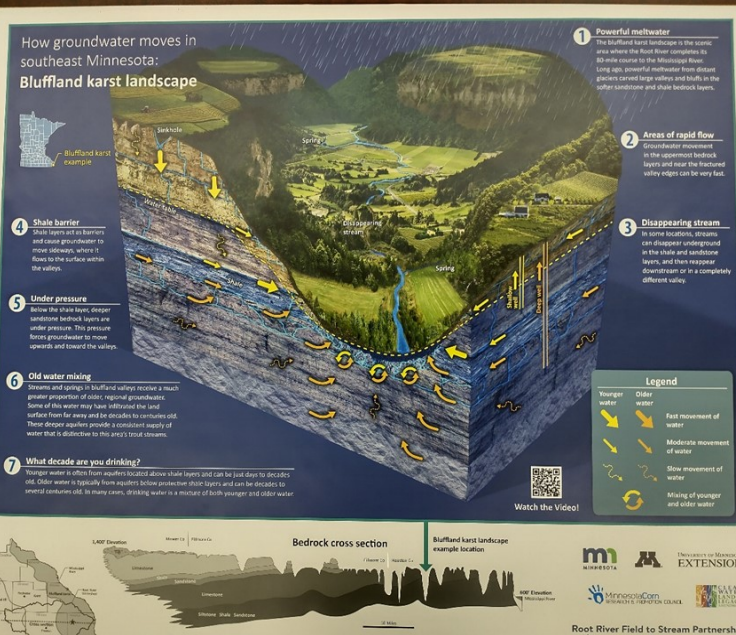
On the 2020 general election ballot, three districts within the county will have an individual running for Root River SWCD board supervisor for their district. Districts that are on the ballot include:

District 1 representing Hokah Township & Village, La Crescent Township & Village, Mound Prairie Township and Union Township;

District 4 representing Caledonia Township & Village, Eitzen Village, Mayville Township and Winnebago Township;

District 3 representing Black Hammer Township, Spring Grove Township & Village and Wilmington Township.

The elected board supervisors will be sworn in and begin their term January 1, 2021.



New Educational Materials on Groundwater Movement and Nitrates

The MN Department of Agriculture has recently created a series of educational posters and YouTube videos. They are very well-done, and explain how groundwater moves throughout the Root River watershed. There are three distinct regions within the watershed that they explain, with water moving very differently in each region. The region that pertains to Houston County is the Bluffland Karst region. The posters are in the SWCD office, so you will have to wait until our doors open back up to see them in person. In the meantime, you can view the accompanying videos at: www.mda.state.mn.us/blufflandkarst. Check it out, its great stuff!



CONSERVATION TREES

The Root River SWCD is announcing their annual tree sale. Trees play an important role in conservation. They serve as windbreaks, assist in providing vegetation on streambanks resulting in decreased run-off into streams and effectively address water quality issues. They provide a significant amount of wildlife habitat, fiber production used in homes, clothing, vehicles, in the workplace and improve esthetics in our communities.

The SWCD offers an array of conifers, deciduous hardwoods, and small trees and shrubs. Conifers are transplants. What is a transplant? A transplant is a seedling that is transplanted from a nursery bed to a wider growing space giving it an opportunity to develop more fibrous roots and thicker stems. Of the conifers, pines have long needles, spruces and firs have short needles and cedars have scaled needles. A majority of the trees that are offered are native to the area.

Our trees are offered at a low cost and are sold in bundles of 25. If you are looking for a specific specie or size not listed on our order form please feel free to inquire as we do try to accommodate special orders.

Trees arrive at the SWCD office in mid to late April. Those that have placed orders are notified of the pick-up date.

It is important that you place your tree order today before stock runs out. Tree quantities are available on a first come, first serve basis **NOW** is the time to make a difference in conservation.



It is important that you place your tree order today before stock runs out. Tree quantities are available on a first come, first serve basis and can go quickly.

Helping You Start the Conversation About Conservation

As fiscal year 2020 wraps up, we reflect on the numbers from the largest CRP sign-up in recent years. Our conservation planners have produced well over 120 conservation plans for the General CRP sign-up and approximately 30 conservation plans were completed for the Continuous sign-up. The two signups differ in that the General CRP has focused on larger, whole-field, 'general' practices; whereas, the Continuous CRP sign-up has focused on implementing riparian practices, such as filter strips and grassed waterways, as well as smaller pollinator habitat projects, which have grown in interest with word-of-mouth.

A notable example of an impressive CRP project includes the largest CRP native prairie restoration project in the entire southeastern portion of Minnesota for our previous Conservationist of the Year, Brownsville local, Joan Heim-Welch. Joan is converting a 105 acre non-native, smooth brome field into a highly diverse native tallgrass prairie. This is accomplished by eradicating the well established introduced cool season grass with well timed herbicide treatments, followed by a no-till seeding of the native prairie mixture and subsequent mowing. Several other conservation minded landowners in our county are also converting poor quality brome fields to more diverse and productive native tallgrass prairies, which will provide enhanced grassland habitat, while improving soil erosion and water quality concerns. The native prairie and pollinator practices also serve to encourage ample insect proliferation and promote well rounded food chains and supportive prairie ecosystems for an array of wildlife species.

Our planners will also work through the winter months on various projects funded by federal dollars through the Environmental Quality Incentives Program (EQIP) offered through the USDA NRCS. EQIP is an all-encompassing program that aims to address resource concerns and improve productivity. EQIP will certainly have an option for you, whether you have aspirations to improve your grazing operation, improve water infiltration by establishing cover crops, adopt direct seeding methods, or diversify your cropping rotation; or perhaps you'd like to install a pond to lessen gully formations, or lessen invasive pest pressure in your woods, promote native trees or establish wildlife habitat through our pollinator programs. Currently, we are collecting applications until the deadline of November 20th. Shortly after, those applications will be ranked, assessed and prioritized, and funding will become available to eligible participants.

We also look forward to the ongoing collaboration and partnership with our local Pheasants Forever and Quail Forever chapters and the MN DNR with the successful funding of a 50 acre native prairie project on various wildlife management areas in Yucatan, Winnebago and Jefferson Townships. This project was accomplished through a Conservation Partner Legacy (CPL) grant provided and matched by DNR. This will provide a unique opportunity to enhance newly acquired state owned acres, whether fallow fields or areas that lacked diversity and habitat suitability, into highly diverse and productive native prairies. Substantial funding has been allocated for the prep work, customized seed mixtures, ongoing management and habitat enhancement techniques, including prescribed burning and edge feathering. Once established, these particular parcels of state land will serve to provide educational and recreational opportunities for hunters, hikers, birdwatchers and nature lovers alike.

Please contact our office for additional information.

Thank you for supporting your local conservation district,

Eric J. Ressel

Farm Bill Wildlife Biologist

Certified Conservation Planner

Pheasants Forever & Quail Forever Inc.

w. 507-724-5261 x111 | c. 262-339-7586 | eressel@pheasantsforever.org



Conservation Tree Descriptions

CONIFERS - TRANSPLANTS

Variety	Size	Maturity Size	Description
Pine, Norway (Red Pine)	7" – 15"	75 - 100'	Needles are 4 – 6" long, flexible, and a dark yellow-green color. Prefers well-drained, moist soils, but will tolerate dry conditions. Prefers full to partial sun. Growth spread ranges from 50-75'. Fast growth rate.
Pine, White	7" – 15"	75 - 100'	Needles are 3-5" long, very soft and flexible, and a bluish-green color. Grows well in rich, moist soil, but does best in moist, sandy loams. Full sun to partial shade. Growth spread ranges from 50-75'. Fast growth rate. Soft, picturesque tree. Good lumber tree.
Spruce, Colorado	7" – 15"	70 - 100'	1" – 1 ½" needle all shades of blue and green with very sharp tips. Prefers well-drained, moist soils but will tolerate dry conditions. Moderately tolerant of shade. Provides a 20-35' growth spread. Medium growth rate.
Spruce, Norway	7" – 15"	40 - 100'	Full sun and drought tolerant 20-50' growth spread. Does well in dry, moist or wet conditions. Fastest growing spruce. Dense draping branches. Needles are ½ to 1" long. Not native.
Spruce, White	7" – 15"	50 - 80'	Needles are ⅓ – ¾" long. Tolerant of shade. Does best in moist, well-drained, gravelly soils. Drought sensitive. Good wildlife cover and useful windbreak tree. Medium growth rate.
Fir, Balsam	12" – 18"	50 - 75'	Shade tolerant with 20-30' growth spread. Prefers moist, wet regime. Sensitive to drought. Bears small cones. Slow growth rate.

DECIDUOUS TREES

Variety	Size	Maturity Size	Description
Maple, Sugar	12" – 18"	50 - 75'	Brilliant orange red fall color. Tolerates shade. Thrives on fertile moist and well drained soils. Collect sap in the spring for your own maple syrup. Valuable for wood products and excellent firewood. Slow growth rate.
Oak, Red	12" - 18"	60 - 80'	Fastest growing Oak. Does best on moist or well-drained sites in full to partial sun. Valuable wood products tree. Acorns provide excellent wildlife food source. Fall color is red to a winter bronze.
Oak, White	12" – 18"	75 - 100'	Does best on slightly moist to well-drained sites. Full to partial sun. Acorns provide excellent wildlife food source. Brown, purple autumn foliage. May hold some leaves over winter. Excellent firewood & valuable wood products tree. Slow growth rate.
Walnut, Black	12" – 18"	70 - 100'	A large tree with medium green, compound leaves. Does best on rich, deep, fertile, well-drained soils. Requires full sun. Widely planted and highly regarded for top quality lumber. Excellent food source for wildlife. Yellow fall color. Rapid growth rate.

SMALL TREES & SHRUBS

Variety	Size	Maturity Size	Description
Nannyberry	12" – 18"	15 – 18'	Upright shrub with growth width 6 – 10'. Full sun, partial sun or shade; sandy loam to silty clay loam. White spring flower turning to drupe, black fall fruit. Drought tolerant. High wildlife rating. Medium growth rate.
Crabapple, Red Splendor	12" – 18"	20 - 25'	Full sun with sandy loam to clay loam soil texture. Should have moderate drainage with dry, moist or wet moisture regime. Growth width 20'. Pink spring flower precedes red fruit from spring through winter. High wildlife rating. Fast growth rate.
Ninebark, Common	12" – 18"	6 – 10'	Sun to Part Shade. Growth width 6– 12'. Features small pink or white five petaled flowers in late spring. Flowers change to drooping clusters of reddish fruit (inflated seed capsules). Shallow lobed leaves up to 3" long that change to an undistinguished yellow in fall. Valuable nectar source for pollinators.
Cranberry	12" – 18"	8 - 12'	Attractive, tall, upright shrub with 8-12' spread. White spring flower followed by red fall & winter berries. Soil texture from sandy loam to clay. Drainage from poor to moderate and drought tolerant. Full sun to shade. Excellent wildlife food and cover.
Dogwood, Red Osier	12" – 18"	6 - 12'	Attractive red stems with white flowers followed by white berries. Growth spread of 6-12'. Red twigs create winter color. Tolerates almost any location, growing in moist soils and full sun. Effective bank cover holds soil well. Excellent wildlife food source and cover. Fast growth rate.
Lilac, Common Purple	12" – 18"	10 - 15'	Delicate, fragrant, purple flowers in May. Perfect for border, screens or windbreaks. Hardy with 6 – 12' growth spread. Prefers rich, well-drained sites and requires full sun. Good for wildlife cover. Not native. Medium growth rate.
Plum, American	12" - 18"	10 - 30'	Small tree with an 8 – 25' spread that produces fragrant white flowers in early spring. Bears 1" red which can be used for jellies. Excellent for wildlife food and habitat. Requires well drained soil and a sunny location. Quite drought tolerant.

HOW MANY TREES DO I NEED & HOW FAR APART DO I NEED TO PLANT THEM?

Windbreaks/Shelterbelts - Shrubs: 6 ft. apart in rows, Trees: 15 ft. apart in rows (Rows should be 15 – 20 ft. apart)

Wildlife Planting - Mixed plantings of shrubs & trees average 10 ft. apart in rows and between rows (about 500 seedlings per acre).

Fiber Production - Average spacing of 8 ft. apart in rows and nine feet between rows (about 700 seedlings per acre).



**Root River Soil and Water Conservation District
TREE ORDER – SPRING 2021**

Name: _____

Home Phone _____

Address: _____

Work Phone _____

E-Mail: _____

CONIFERS – TRANSPLANTS (Tree information can be found on back side.)

Variety	Type	Min. Size	Price of 25	# of Bundles	Extended Price
Pine, Norway	Transplant	7" – 15"	\$38.00		
Pine, White	Transplant	7" – 15"	\$38.00		
Spruce, Colorado	Transplant	7" – 15"	\$38.00		
Spruce, Norway	Transplant	7" – 15"	\$38.00		
Spruce, White	Transplant	7" – 15"	\$38.00		
Fir, Balsam	Transplant	12" – 18"	\$43.00		

Total # of Trees (# of bundles x 25)

DECIDUOUS TREES (Tree information can be found on back side.)

Variety	Type	Min. Size	Price of 25	# of Bundles	Extended Price
Maple, Sugar	Seedling	12" – 18"	\$ 32.00		
Oak, Red (Northern)	Seedling	12" – 18"	\$ 32.00		
Oak, White	Seedling	12" – 18"	\$ 32.00		
Walnut, Black	Seedling	12" – 18"	\$ 32.00		

Total # of Trees (# of bundles x 25)

SMALL TREES & SHRUBS (Tree information can be found on back side.)

Variety	Type	Min. Size	Price of 25	# of Bundles	Extended Price
Nannyberry	Seedling	12" – 18"	\$ 33.00		
Crabapple, Red Splendor	Seedling	12" – 18"	\$ 33.00		
Cranberry Bush	Seedling	12" – 18"	\$ 33.00		
Ninebark, Common	Seedling	12" – 18"	\$ 33.00		
Dogwood, Red Osier	Seedling	12" – 18"	\$ 33.00		
Lilac, Common Purple	Seedling	12" – 18"	\$ 33.00		
Plum, American	Seedling	12" – 18"	\$ 33.00		

Total # of Trees (# of bundles x 25)

MISCELLANEOUS

Item	Price	Qty	Extended Price
Flags, Fluorescent Pink Bundle of 100	\$ 10.29		

Subtotal _____

_____ Total # of Trees

MN State Sales Tax 6.875% + County Transit Tax (effective 1/1/19)
(Does not include Houston County) _____

Total _____

- ✓ Trees will be sold on a first come first serve bases.
- ✓ Trees usually arrive mid-April. We will send out a post card or e-mail notifying you of pick-up dates.
- ✓ Call our office to check on tree availability. (507) 724-5261 ext. 3
- ✓ Special ordering available upon request.
- ✓ We purchase good stock, but make no survival guarantee.
- ✓ Payment is due in full with order. Make checks payable to: Houston County Treasurer

Mail to: Root River SWCD
805 N. Hwy. 44/76, Suite 1
Caledonia, MN 55921

Phone: (507) 724-5261 Ext. 3

