POPE SOIL & WATER



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1680 Franklin Street N Glenwood, MN 56334 (320) 634-5327 SWCD (320) 634-5143

POPE SOIL AND WATER CONSERVATION DISTRICT

Conservation News November 2019

DON AND SHARI OPDAHL ARE NAMED 2019 OUTSTANDING CONSERVATIONISTS



Pictured Above: Don and Shari Opdahl

The Pope SWCD would like to congratulate this year's Outstanding Conservationist, Don and Shari Opdahl. Don is an employee of the Minnesota Department of Agriculture (seed, biotech, and noxious weed unit) for the past 28 years. Shari is a retired music teacher of 34 years and most recently worked at Glacial Hills Elementary school.

The Opdahl's operate an 820 acre corn and soybean farm south of Starbuck, Minnesota. The entire farm

is on a 4 year rotation for grid soil sampling. The Opdahl's have implemented 9 water and sediment control basins starting in 2015. They also installed approximately 20 water quality inlets on the remaining open intakes on their farm. They converted 1 open intake to a rock inlet design. Don and his family have been very supportive of the Pope SWCD and NRCS. They have on at least 2 occasions allowed our office to use their sites for educational program tours.

Don and Shari are very deserving of this recognition as the 2019 Outstanding Conservationists of the Year. They addressed their erosion concerns by implementing structural practices but were receptive and did implement new management to their tillage program. Their entire operation was reviewed under the Minnesota Ag Water Quality Certification program and did meet the criteria for certification once the tillage was adjusted, intakes were closed, and structures were installed. Don is a fourth generation Pope County farmer who hopes to pass this farm off to the fifth generation,

his son. These investments Don and Shari have made will have a large impact on the future of the farm. Congrats again to the Don and Shari Opdahl Family on their efforts to improve their land for future generations.

They will be recognized in December at the Minnesota Association of Soil and Water Conservation Districts annual conference in Bloomington, Minnesota and by our County Board.

Congratulations to the Ondahl Family or

Congratulations to the Opdahl Family on this well deserved recognition.



The Opdahl's were Minnesota Ag Water Quality Certified in 2019. Pictured Above are: Grant Pearson (Stearns SWCD), Doug Opdahl, Don Opdahl, and Holly Kovarik (Pope SWCD)

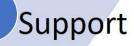
Minnesota Agricultural Water Quality Certification Program <u>How To Guide:</u>

Minnesota is known as the land of 10,000 lakes, which means we have a lot of water resources. Would you do whatever you could to help protect it? The Minnesota Agricultural Water Quality Certification Program (MAWQCP) is a voluntary program for farmers and landowners to do everything they can to keep protecting our states waters and to share the existing stewardship. Benefits of becoming certified are they are deemed in compliance with new water quality rules for the next 10 years, they can obtain technical and financial assistance to implement practices that improve water quality, and most importantly they get to promote their operation as a business that is protective of water quality. Currently Pope SWCD has 27 applications from landowners with 22 certifications and 4 that are currently in progress. We have a total of 12,768 acres certified in the program. You can contact Holly or Nicole at the Pope SWCD to start the process for your operation today.



THE PROCESS





Staff assists landowner with enhancements

Staff completes field verification of practices and to determine of acres meet criteria for certification



Staff meets with landowner to go over management of the operation and potential options

Meet



Certification Specialist assists with field-by-field risk assessment

Landowner contacts
Pope SWCD signs application





Holly Kovarik (Pope SWCD), Mark and Denise Tebrake



Jake Wildman and Holly Kovarik



Jessica Blair and Grant Pearson



Chris and Mark Halls and Holly Kovarik

Conservation Reserve Program Update

Recently the Conservation Reserve Program (CRP) had a deadline (9/30/2019) for Sign-Up 52. Our office was able to re-enroll 26 CRP contracts and 3 new contracts. Many landowners had the option with this sign-up of the one-year extension and we were able to have 64 contracts participate. One landowner was also able to enroll into the Conservation Reserve Enhancement Program (CREP). Both programs benefit our county as an increase in wildlife habitat, improve water quality, and reduce erosion. With one sign-up ending we are starting to prepare for next year and plan to do site checks this fall on contracts that expire in 2020. If you have questions, please contact Nicole Brede or the NRCS staff Jeff and Melissa at 320-634-5327. Wishing everyone the best this fall during harvest and hunting seasons.



Attention Conservation Stewardship Program Participants:

The Natural Resources Conservation Services (NRCS) would like to remind Conservation Stewardship Program (CSP) participants to bring in documentation for the 2019 growing season. The last day to process a 2019 calendar year payment is December 13th. DO NOT WAIT TILL THE 13TH TO COME IN. If you have questions about CSP or any NRCS program, please contact us at 320-634-5143 ext 111 or ext 101.

FALL OUTREACH GLACIAL HILLS DAY, POPE AND STEVENS COUNTY WATER FESTIVAL, AND CONSERVATION DAY













TREES AND GRASS MIXES FOR PURCHASE

SEE PAGES 5 AND 6. CONTACT KELLY AT 320-634-5327 EXT:113

Kernza Research Begins at Rosholt

Pope SWCD is working alongside the U of M and Stearns SWCD on studying the benefits of a new crop called Kernza. The study being done at our Rosholt research farm in Westport is to test the amount of nitrate leaching present in perennial crop productions. This spring we started with preparing the site and planted wheat after a corn/soybean rotation. This early fall we were then able to assist in the planting of the Kernza plots. Our office looks forward to what we can learn about Kernza and what this crop will be able to do for not only agriculture but for water quality.



Pictured Above: Field of Kernza

The three goals of the Kernza project are: 1) Test that
Kernza and other native seeds are more effective at reducing nitrate leaching than alfalfa and prairie
under irrigated and rain-fed conditions by measuring nitrate samples collected from lysimeters. This work
is being done by U of M and Pope SWCD staff. 2) Establish Kernza fields within the City of Cold
Spring's DWSMA and near the City of St. cloud's Water Treatment Plant. These sites will be monitored
for leaching and field production by the Stearns SWCD staff. 3) Examine Kernza as a food ingredient
(bread, cereal pasta, beer, etc.) and non-food (straw) with MN companies and map local processor
capabilities, opportunities, and barriers. Characterize and provide technical information on handling,
storage, formulation, and shelf life of Kernza product development concepts. Supply nutritional profiles
for food/beverage containing Kernza and conduct sensory analysis. The Agricultural Utilization
Research Institute (AURI) will take lead.

Kernza is a domesticated variety of intermediate wheatgrass. This grain is already attracting attention from restaurants, bakeries, and breweries as being a new perennial grain. What is unique about this sod-forming grass is the very deep roots, growing to a depth of 10 feet. With such deep roots the plant is able to capture and use nitrate in the soil that otherwise leach into our groundwater. Excessive nitrate in groundwater can cause health problems and treatment for drinking water can be expensive. For more information please contact our office at 320-634-5143.



Buffer Verification in Progress.

Pope SWCD staff are out verifying buffers are installed.

Buffer deadlines:

- Public Water- November 1, 2017
- Public Ditch- November 1, 2018



2020 SALES PROGRAM ORDER FORM

POPE SOIL & WATER

CONSERVATION DISTRICT 1680 Franklin St North, Glenwood, MN 56334

> PHONE: (320) 634-5327 www.popeswcd.org

Name:	
Address:	
City, State Zip:	
Email:	
Day Phone:	
Home Phone:	

Order early for the best selection of trees.

You will be notified in April of pick-up dates for trees, tree products, and for grass seed orders. Orders received before December 10th, 2019 for 2020 planting will receive 10% off the tree order. Special orders available upon request, call now to secure your order! No project to big or small! Prices are subject to change.

ITEM	PRICE	#ORDERED	AMOUNT
SHRUBS (All Bare Root) priced per bundle of	25 Trees	•	
Buffaloberry	\$41.25		
Chokeberry, black	\$41.25		
Hazlenut	\$41.25		
Hi Bush Cranberry	\$41.25		
Juneberry	\$41.25		
Nanking Cherry	\$41.25		
Cotoneaster	\$41.25		
Redosier Dogwood	\$41.25		
Sand Cherry	\$41.25		
Villosa Lilac	\$41.25		
Common Lilac	\$41.25		
LARGE TREES (All Bare Root) priced per bun			
Siouxland Cottonwood	\$41.25		
Hackberry	\$41.25		
Bur Oak	\$41.25		
Silver Maple	\$41.25		
Sugar Maple	\$41.25		
American Linden Basswood	\$41.25		
SMALL TREES (All Bare Root) priced per bun	dle of 25 Trees		
American Plum	\$41.25		
Common Chokecherry	\$41.25		
Red Splendor Crab	\$41.25		
EVERGREENS priced per bundle of 25 Trees			
Black Hills Spruce	\$44.00		
Colorado Blue Spruce	\$44.00		
Ponderosa Pine	\$44.00		+
American Arborvitae (White Cedar)	\$44.00		+
Red Pine (Norway Pine)	\$44.00		+
Too I no (norway I no)	Ψ17.00	# Trees Ordered:	
			
**Conservation Grade Trees Must Be Ordered in	Page Total: \$		

Minimum Quantities of 25 unless otherwise noted.

See Reverse Side for Tax.

2020 SALES PROGRAM ORDER FORM



ITEM	PRICE	#ORDERED	AMOUNT				
POTTED EVERGREENS (other varieties of evergree		request)					
Black Hills Spruce	\$16.50 each						
TREE CARE (Plant Skydd Repellent)							
Plantskydd (deer/rabbit) Repellent							
(treats 200-300 1' seedlings) 1 lb powder	\$25.00						
Plantskydd (deer/rabbit) Repellent							
(treats 400-600 1' seedlings) 2.2 lb powder	\$37.00						
Plantskydd (deer/rabbit) Repellent							
(treats 100 1' seedlings) 1 liter premixed	\$20.00						
TREE CARE							
Tree Shelters 4' height (biodegradeable)	Call for Pricing						
Wood Stakes 4' height	Call for Pricing						
Weed Control Mats 3x3 w/ 4 staples	\$3.50						
Bulk Roll of Weed Fabric 500' Staples/1000 per box (Anchor Pins)	\$150.00 per roll \$80.00 per box						
Staples/1000 per box (Afficinor Pins)	\$60.00 per box						
SERVICES All Services have a \$75.00 one time se	rvice charge						
Custom Installed Weed Fabric (fabric included in price)			I				
Custom Tree Planting (\$100 minimum charge)	\$0.60 per tree						
Custom Mowing	Call for Pricing						
Custom Cultivation	Call for Pricing						
Custom Grass Seeding ATV	Call for Pricing						
Custom Grass Seeding No-till Drill	Call for Pricing						
EQUIPMENT RENTALS (Delivery charges do apply)							
Tree Planter (minimum charge of \$50.00)	\$50.00 per day						
No-Till Drill (minimum charge of \$75.00)	\$9.00 per acre						
Packer (minimum charge of \$75.00) Rainbarrels	\$2.50 per acre \$65.00 each						
	\$65.00 each						
CUSTOM GRASS SEED MIXES (priced per acre)							
Custom mixes available upon request suited to meet program requirements. Call for a quote 320-634-5327							
		-					
*Planning and Design service with on-site visit. (FREE) *Trees sold are for conservation purposes only.		Total This Side :					
*SWCD cannot guarantee survival rate of trees.	Total Front Side :						
"SWCD reserves the right to substitute sizes or cancel specie	Subtotal:						
A 25% down payment is required on all orders at the time of	6.875% Sales Tax :						
All orders after March 1st 2020 must be paid in full at the time	Total Order Cost:						
balances due by April 1st, 2020. Orders Cancelled after Feb							
be charged a 25% cancellation fee. *10% Off Tree Orders sent in by December 10, 2019.		Paid:					
	Balance :						

Pope SWCD prohibits discrimination in all their programs and activities on the basis of color, national origin, sex, religion, age, disability, and where applicable (including gender identity and expression), marital status, parental status, religion, sexual oreintation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program.

ROSHOLT RESEARCH FARM TRIALS

The Rosholt Research Farm is a 40-acre farm owned by Pope Soil & Water Conservation District located in Westport, Minnesota where nitrogen and water quality research is the focus. Due to the farm's uniform soil type (course-textured sandy soils), soil depth, level, topography, and adequate water it is ideal for irrigation research. Currently a partnership between Minnesota Department of Agriculture, University of Minnesota, Pope and Stearns SWCDs is underway to study nitrogen fertilizer management and the associated water quality impacts on irrigated course-textured soils.

Water quality monitoring for some of the projects are accomplished using suction-tube lysimeters that are buried in a protective PVC pipe at varying depths ranging from four to six feet below the surface. Water is pulled through the lysimeters' ceramic tip that is under vacuum and collected every week during the entire growing season and analyzed on site. Over two-hundred water samples are collected from the lysimeters that span the three 535x60 ft. test plots on the farm. While each test plot has a uniform soil type they each explore a different row crop and rotation, along with a different fertilizer application rate. The east section is soybean-corn, the central section is corn-soybean, and the west is corn-corn. Once the water samples are collected a nitrogen analysis is run on each individual sample. Nitrate levels are determined using a HACH spectrophotometer model DR6000. The spectrophotometer gives nitrogen concentrations by reading wavelengths that





Pictured Above: Tiffany Muellner worked at Rosholt during her internship this past summer

pass through the sample as it funnels through the vial within the machine. These values give researchers an idea of the groundwater nitrate levels across the plots.

In addition to the suction tube lysimeters, data is also collected from drain gauges, barrel lysimeters, and rain gauges. Drain gauges are used to measure the volume of water draining into groundwater. The water samples pulled from the drain gauges are also analyzed for nitrates. This information is considered when studying how leaching affects nitrate concentrations. For a related study led by the University of Minnesota, water samples are also collected from barrel lysimeters that are buried within the soil profile throughout the plots. These open cylindrical containers accumulate water as it filters through the ground. Similar to samples pulled from the drain gauges, volumes and nitrate concentrations are also taken from the barrel lysimeter water samples. Aside from nitrogen studies, irrigation studies are also being conducted at the Rosholt Research Farm. In order to determine when the irrigator should be run, rain gauges are used to provide precipitation amounts.

POEGEL NAMED TEACHER OF THE YEAR



Judy Johnston (Stevens SWCD), Holly Kovarik (Pope SWCD), Kaley Poegel, Jessica Hoheisel (Pope SWCD), Nicole Brede (Pope SWCD)

On behalf of Pope and Stevens SWCDs, we would like to congratulate Kaley Poegel a 4th grade teacher at Glacial Hills Elementary School. Kaley was nominated by these SWCDs for the Minnesota Association of Soil and Water Conservation District's Teacher of the Year. Kaley was selected as this year's recipient. She will be honored in December at the MASWCD Conference on December 9th and by the County on December 17th. Congratulations Kaley for all you do for our area youth and especially your work on teaching them about the environment.

POPE SOIL & WATER



1680 Franklin St North Glenwood, MN 56334

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IMPORTANT DATES

Board Meetings are held the third Tuesday of each month at 7am. The public is welcome to join us.

November 19 Board Meeting

December 17 Board Meeting

January 21 Board Meeting



SWCD BOARD OF SUPERVISORS

Keith Nygaard, Tom Talle, Randy Pederson, D. Gary Reents, Randy Mitteness



SWCD STAFF

Nicole Brede (Farmbill Technician), Holly Kovarik (Manager), Jessica Hoheisel (Technician), Kelly Erickson (Technician)