POPE SOIL & WATER



Conservation News

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POPE SWCD COMPLETES SHORELINE RESTORATIONS

Pope SWCD staff worked on three shoreline restorations in early June. These restorations are on Lake Scandinavian and Minnewaska. Over 3,000 native flowers and grasses were planted by the landowners and SWCD staff. This program is made possible through funding from a grant received through the Department of Natural Resources .

If you are interested in restoring your shoreline with plants call our office. We are now planning for next summers plantings. Call 320-634-5327 ask for Holly or Grant.



<u>Sponsoring</u> <u>Agencies:</u>





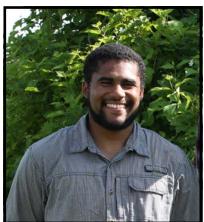
CONSERVATION RESERVE PROGRAM SIGN UP NOW

The Pope SWCD in partnership with the Natural Resource Conservation Service and Farm Service Agency are working with landowners on re-enrollments of expiring Conservation Reserve Program (CRP) and Continuous Conservation Reserve Program (CCRP) contracts. Certain practices have had limited acres in Minnesota . Over the past few weeks staff have been contacting landowners with these expiring contracts to re-enroll these acres. There is still time to re-enroll those acres especially on the sensitive buffer areas. Call our office to discuss options with Grant Bullemer 320-634-5327.

Pope County fair held july 30-august 3

The Pope SWCD will have a booth at the Pope County Fair July 30-August 3rd. Stop by our booth to learn more about conservation work happening throughout the county. We will be in the Industrial Arts building located right off of Hwy 28. We hope to see you at the fair!

Conservation Corps Apprentice



Terrence Chastan-Davis
Conservation Corps Apprentice

While deciding where to go to college I had two paths of which to choose from: either stay in the twin cities or branch out to experience something different. This was a big decision that many high school seniors often find themselves with, although it took some time to decide I chose to attend the University of Minnesota Morris. While attending the University I had the opportunity to play football and run track while

majoring in Environmental Studies. I was pleased to accept a position with the Conservation Corps Apprentice Academy this May where I was placed at the Pope SWCD.

Conservation Corps gives youth and young adults the opportunity to learn about natural resources management, conservation, emergency response fields from a variety of different programs that provide hands on experience through service learning projects. Currently, there are two youth programs (ages 15-18) and six AmeriCorps positions (ages 18-25) such as Apprentice Academy or field crews. The Corps also has a strong passion for community service in all their programs making it a great program to give back to the community. This is why I was drawn to this organization over others. The Apprentice Academy gives young adults the experiences of working for soil and water conservation districts by shadowing a district manager and working alongside other staff to complete various projects. Already, I have been able to assist the wonderful staff in a few different projects during the short time I have been here.

Since starting in mid-May, the two main projects that I have had a hand in finishing include: tree fabric and planting shoreline restorations. Both projects have been a learning experience for me. The main project that I will be working on is assisting the Pope County Highway Department in the inspection of public ditches. The purpose of the project is to survey County drainage systems for blockages, erosion, and buffers. Landowners are beings sent notification.

I will also assist with community outreach activities including the Pope & Stevens County Waterfest and the Pope County Fair. I look forward to learning more about Pope County and I am excited to meet more people in the community during my time here.

POPE SWCD CAN ASSIST WITH YOUR CRP PLANTING

The Pope SWCD offers a complete package of services and products to aid in implementing native grass plantings enrolled in conservation programs.



Call today to set up a time to meet with staff to discuss your project and provide an estimate. Ask for Kelly!

TREE DEDICATION FOR PETER GILBERTSON



In June, the Pope SWCD Board and Staff along with family of Peter Gilbertson conducted a dedication of a tree in memory of the 17+ years of conservation work he completed throughout the county. Keith Nyaard chairman of the board spoke a little about Pete and how he did so much for conservation in Pope County. "He has left his print all over the landscape," Nygaard said. Gilbertson worked for the district during the boom years of the CRP program. He was instrumental in planting trees, native grasses, and managing the research at the Herman Rosholt Research Farm in Westport, MN.

For those of you who knew Pete, he was a character. We will miss his sense of humor, his dedication to conservation, and his tremendous work ethic.

May you rest in peace Pete.

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NITRATE RESEARCH CONDUCTED AT ROSHOLT RESEARCH FARM

Luke Johnson was recently hired by the Pope Soil and Water Conservation District as the Hydrologist Intern at the Rosholt Research Farm near Westport, Minnesota. He is from Alexandria Minnesota, and graduated from Jefferson High School in 2009. He attended college at Bethel University, and graduated in December of 2013 with a BA in Biology. Some of his hobbies include golfing, fishing, and hunting. He will work on this project through the end of the summer and the data that he is collecting will be important for understanding water quality impacts on specific soils.

The purpose of the study in Westport is to provide a better understanding of nitrogen fertilizer management and the water quality impacts on irrigated, sandy soils. The study will assess nitrogen loss resulting from different nitrogen fertilizer application rates, application timing, application methods, and slow release nitrogen fertilizer products all under irrigation.



Photo Credit: Minnesota Department of Agriculture

Root zone water is collected from a series of lysimeters (a porous ceramic tipped PVC pipe placed about 4 feet deep in the root zone). Lysimeter sample lines are enclosed in protective PVC pipe and buried in trenches below the surface so normal tillage and other farming operations can be performed. Water samples are collected weekly during the entire growing season and analyzed on site using a Hach Ultraviolet Spectrophotometer. The Hach machine analyzes the nitrate concentration in parts per million (ppm). Water volumes collected from the eight drain gauges provide information about water flow through the soil root zone. All of the data that is collected over the growing season is sent to the University of Minnesota to help revise nitrogen fertilizer recommendations for irrigated coarse-textured (sandy) soils.

There are risks associated with high levels of nitrates in the groundwater that directly affect our everyday lives. High levels of nitrates that get into our streams and lakes can cause overstimulated growth of aquatic plants. This in turn can possibly take up all of the dissolved oxygen that is contained within the water and cause large fish kills. High levels of nitrates in the groundwater can also be harmful to humans and livestock when consumed in concentrated amounts. It can occur naturally in groundwater at levels typically in the range of 0 to 3 parts per million (ppm). Human activities such as sewage disposal, livestock production, and lawn and crop fertilization can potentially elevate the level of nitrate in groundwater. Nitrate has been found above the 10 ppm drinking water standard in Minnesota groundwater (specifically drinking water), mainly in areas of sandy and rocky soil that allows for fast movement of water through the soil. Infants younger than 6 months are extremely susceptible to the harmful effects of high levels of nitrates in the water.

A couple of important events will be held this summer. The first event is sponsored by the Pope Soil and Water Conservation District and Pope County Land and Resource Management office to offer free water testing at the Pope County Fair on August 2nd in the Industrial Arts Building from Noon till 4 p.m.

A field day will also be held on August 7th in partnership with Prairie Lakes Coop to share with the public the research that is being conducted at the farm in Westport.

This program has been funded by a grant to the Pope SWCD from the Minnesota Department of Agriculture. The current grant expires in 2015. This is a unique public private partnership effort. The following agencies have partnered on this project to make it a success: Pope SWCD, Stearns SWCD, Minnesota Department of Agriculture, University of Minnesota, and Prairie Lakes Coop.



The Walk In Access (WIA) Program is open to land that is already enrolled in a conservation program which would allow public hunting on private land. The landowners that voluntarily choose to enroll in this program are compensated for the public hunting. WIA began in 2011 by legislation and is managed under the Department of Natural Resources. If you are interested in learning more about this program stop by the Pope SWCD and talk to Grant Bullemer to learn more.

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COOPERATIVE WEED MANAGEMENT PROGRAM

Recently, Pope SWCD was awarded a grant for the Cooperative Weed Management Program (CWMA) in Pope and Swift Counties. The objective of this program is to approach our counties invasive weed species problems through education, documentation, treatments, and re-seeding with local native seed. An intern was recently hired to monitor infestations along with documenting the locations with GPS. Our main goal in this program is to reduce the environmental and economic threats posed by invasive plant species in the grasslands of Pope and Swift Counties. Educating and raising awareness of the significance of these threats is key to achieving our goal.

Our initial control efforts began with targeting Wild Parsnip, Spotted Knapweed, and Common Tansy but our control efforts are not limited to just these species. Treatment of infestations will include chemical, mechanical and biological control methods along with monitoring treated sites. The intern will work this summer to educate the public, land managers, township weed inspectors, county commissioners, private landowners, and SWCD board members about these invasive weeds, why we need to control them, and how to treat them.



Nicole Zimmerman CWMA Intern

Nicole Zimmerman was recently hired as the CWMA intern. She is from Alexandria Minnesota and graduated from NDSU in 2013 with a B.S. Degree in Range Science and minors in Animal Science and Natural Resources Management. Her hobbies are fishing, hunting, four wheeling, and enjoying the outdoors.

Her responsibilities will be to develop informational pamphlets featuring all invasive weed species known to Pope & Swift Counties, the threats they pose and how to treat them. Other educational actions will be taken like promoting state and national weed awareness events, developing educational materials for grade schools, setting up a booth at the county fair and "Weed of the Week" articles for the local newspapers. She will also update the Weed Watchers website. Nicole will be heading up most of these projects and conducting ocular weed surveys focusing on roadsides and railroads but not limited to these areas.

Our goal is to canvas the two counties to locate all infestations of the targeted weeds so that control methods can be established and implemented to limit the spread or eradicate these invasive weeds. Monitoring of the located infestations will be conducted in subsequent years to assess the success of treatment methods, and to determine if further control treatment is necessary. Restoration of sites with local ecotype native seed will be implemented when needed.

The CWMA project partners are: MnDOT, Pope County Highway Department, Pope County Land and Resource Management, U.S. Fish and Wildlife Service, The Nature Conservancy, Department of Natural Resources, Natural Resources Conservation Service, Farm Service Agency, University of Minnesota Extension service, and Pope and Swift Soil and Water Conservation Districts. These partners have established a steering committee and are working together to make this program a success. For more information or to report infestations contact the CWMA intern Nicole Zimmerman at nicole.zimmerman@co.pope.mn.us or call 320-634-7793.

PLANTSKYDD DEER REPELLANT AVAILABLE FOR PURCHASE

Plantskydd is available in powder and liquid form and in a variety of quantities. This product has been quite effective when used on newly planted trees and shrubs to protect them from deer that browse on young trees. The smell of the product is what keeps the deer away. Stop in the office to purchase. We always have the product on hand.



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2014 POSTER CONTEST RESULTS "JUST DIG IT-MYSTERIES IN THE SOIL"

During the 1930s, the United States was plagued with the dust bowl which destroyed countless miles of crop land due to severe droughts and failure to prevent wind erosion. These unfortunate events completely changed the state of many crop fields, forcing many farmers too move elsewhere. After these events, the nation became more aware of the importance of conservation practices with the president of the National Association of Conservation Districts (NACD) stating that: "Soil is an essential natural resource that all of us depend on each and every day". The Pope County Soil & Water Conservation district (SWCD) along with others like it, work with farmers and land owners to implement a variety of projects while dealing with local outreach to improve the soil health of both current and future lands. To learn more about soil types in your community, please visit http://websoilsurvey.sc.egov.usda.gov. Along with the website, you can also download an application called "soilweb" for smart phone devices which also gives information about local soils. The app was developed by the California Soil Resource lab in collaboration with the USDA Natural Resource Conservation Service and can be another great resource.

This year teachers and students were invited to participate in the Annual Poster Contest put on the by The Pope County Soil & Water Conservation District (SWCD). With this year's theme being "Dig Deeper: Mysteries in the Soil", teachers and students of three local elementary schools (Belgrade Brooten Elrosa (BBE), Minnewaska Elementary, and Glacial Hills Elementary) were challenged to use their creative skills by creating informative posters that highlight some facts about soil. There were a total of three winners from each school along with another three overall winners for the County. Here are the Poster Contest results:

BBE

- 1. Dacia Herickhoff-6th
 Grade, parents
 Michelle & Kurt
 Herickhoff
- **2. Grace Illies-**6th Grade, parent Jennifer Illies-Sabol
- **3. Jozey Goodall-5**th Grade, parent Darren Goodall

Minnewaska Elementary

- **1. Amberly Bengtson-**5th Grade, parent Krista Bengtson
- **2. Macabe Thoen-**6th Grade, parents Steven and Stephany Thoen
- **3. Savannah Lorsung-**6th Grade, parent Deb Linn



Glacial Hills Elementary

- **1. Kallie Larson**-6th Grade, parent Katie Larson
- **2. Abbie Barsness**-5th Grade
- **3. Josiah Wright**-6th Grade, parent Heather Wartner



Overall Winners

- 1. Amberly Bengtson-5th Grade, parent Krista Bengtson
- **2. Dacia Herickhoff-**6th Grade, parents Michelle & Kurt Herickhoff
- **3. Macabe Thoen-** 6^{th} Grade, parents Steven and Stephany Thoen

The Pope County Soil & Water Conservation District would like to thank everyone that participated in the poster contest. The winning posters will be posted on the SWCD website www.popeswcd.org so make sure to check them out. The overall winners will compete at the area II meeting in June. Area II covers twelve Counties. Congratulations to all the winners and good luck to the overall winners at the area contest.



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WELL SEALING COST SHARE PROGRAM AVAILABLE



Pope SWCD has some funding to provide cost-share assistance for well sealing. The SWCD will contract with the property owners to share the cost of priority-abandoned wells. In turn, the property owner must contract with a state-licensed well sealing contractor to perform all necessary work. All work must be done in accordance with the Minnesota Well Code, including the filing of a sealed well record with the Minnesota Department of Health. Upon completion of all of the required work and the submission of the required documents to the SWCD, reimbursement to the property owner will be made.

The Pope SWCD will provide 75% cost-share per well not to exceed a maximum of \$500 per well. The funding is limited therefore not everyone will be funded.

To learn more about this program or to request an application call 320-634-5327 and ask for Holly.

Prairie Lakes Coop, Minnesota Department of Ag, and the Pope Soil and Water Conservation District will hold a <u>FIELD DAY</u> on <u>AUGUST 7th</u> at the Rosholt Research Farm near Westport.

Field Day Schedule: 9:00 Registration

9:30-Noon Sessions: Precision Ag, Irrigation Technologies, U of M
Trial Research, BASF Chemical Trials

SPONSORED MEAL AT NOON



Picture Courtesy of Prairie Lakes Coop

NITRATE WATER TESTING CLINIC TO BE HELD AUGUST 2 NOON TO 4 PM

The Pope SWCD in partnership with the Minnesota Department of Agriculture (MDA), and the Pope County Land and Resource Management Department will hold a free nitrate water testing clinic at the Pope County Fair Industrial Building on Saturday, August 4th from noon till 4 p.m.

Nitrates are the most common contaminants in Minnesota's groundwater, and in some areas of the state a significant number of wells have high nitrate levels. With that in mind, experts recommend that private well owners who get their drinking water from wells should test their water regularly.

To participate in the testing, homeowners are asked to bring at least one-half cup of water in a clean plastic or glass container. To get a good sample, allow the tap to run for 5 to 10 minutes before filling the container. Homeowners with distillation units, reverse osmosis or other nitrate removal systems should take two water samples-one before and one after the treatment process. This will determine if the system is working. Homeowners with just a water softener only

need to take one sample, either before or after the water passes through the water softener.

Samples should be taken no more than 24 hours before the testing and must be kept refrigerated prior to testing. To ensure

accurate results, homeowners should mark the container with their name, phone number and well identification number if more than one well is sampled. Homeowners who wish to remain anonymous should choose an easily recognized "code number" to identify their sample. It is not necessary to provide information about the well or well location.

Samples will be analyzed on the spot-the process usually takes less than five minutes –and results will be given directly to the homeowner. If the nitrate level in a sample is elevated, clinic staff can refer the homeowner to a certified lab that will retest the water. For questions about the clinic or how to take a water sample contact the Pope SWCD at 320-634-5327.



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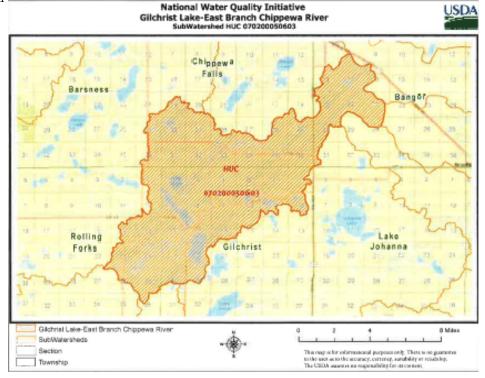
GILCHRIST WATERSHED NATIONAL WATER QUALITY INITIATIVE

Gilchrist watershed was selected by the Natural Resources Conservation Service for the National Water Quality Initiative (NWQI). There were three watersheds nationwide selected All three watersheds are impaired due to sediment and turbidity. The Gilchrist Lake watershed is also impaired due to nutrients. In addition, all three watersheds have at least one impaired water body. These watersheds are approximately 20,0000 acres in size. The Gilchrist Lake watershed is a tributary to the Chippewa River and is located in the southeast portion of Pope County. The primary landuse in this watershed is cropland and pasture.

Landowners in this priority watershed can be eligible for additional funding for putting conservation on the ground to improve water quality.

If you are in this priority watershed and are interested in completing a conservation practice contact the NRCS office at 320-634-5143. All applications for funding

consideration during fiscal year 2014, must be received by August 15, 2014.



NOTES FROM THE FEEDLOT OFFICER/AG INSPECTOR



Livestock producers work with their local county feedlot officer to be in compliance with county and state feedlot rules and regulations. Livestock producers inform their neighbors about manure hauling schedules during the manure pumping season, which is generally in the spring and fall each year.

LIVESTOCK ODOR

This time of year the Pope County Land and Resource Management Office receives calls from citizens about livestock odor. The Minnesota Department of Agriculture (MDA) and the Minnesota Pollution Control Agency (MPCA) jointly have created a fact sheet on this topic. A copy of this brochure can be found by contacting the Pope County Feedlot Officer or the Pope County Land and Resource Management Office.

Livestock producers are implementing a variety of best management practice to control odor, gas, and dust emissions.

Currently the State of Minnesota only regulates Hydrogen Sulfide and Particulate Matter emissions from livestock operations. Odor is not regulated by the State at this time. The MPCA is responsible for enforcing the Hydrogen Sulfide and Particulate Matter emissions.

More information can be found on the following websites:

- http://www.pca.state.mn.us/programs/ odor.html
- http://www.health.state.mn.us/divs/ eh/air/rules.htm
- http://www.manure.umn.edu/applied/ air_quality.html#setbacksOFFSET

You can also contact Barry Bouwman (Pope County Feedlot Officer) 320-634-7793

MANURE STOCKPILES

Manure stockpile sites need to be properly located. Two important things to remember when stockpiling is to put them a distance away from any water features such as ditches, tiles, wetlands, and road ditches. The other important consideration is location to homes. Any stockpiles placed within 500 feet of a residence will be in violation upon complaint of a home owner and Pope County will issue notice to remove the stockpile. Please call the feedlot office for assistance to locate stockpiles and avoid nuisance complaints at 320-634-7793



POPE SOIL & WATER



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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.

July 15 SWCD Board

Meeting

August 2 Nitrate Clinic at

Fair

August 7 Rosholt Field

Day

August 19 SWCD Board

Meeting



SWCD BOARD OF SUPERVISORS

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