



PROGRAM PAYS LOCAL LANDOWNERS TO ALLOW PUBLIC HUNTING ON THEIR LAND

Local landowners can earn money by allowing public hunting on their private land through the Walk-In Access (WIA) program, according to Matt Fischer of the Pope County Soil and Water Conservation District (SWCD).

“WIA is an effective way for landowners to generate extra revenue from their habitat acres,” Fischer said. “We hope to enroll 1,000 WIA acres in Pope County by spring. This will be added to 581 acres of WIA in our county which were enrolled in multi-year agreements last year.”

WIA pays landowners by the acre to allow hunting access. The program targets privately owned parcels of 40 acres or more that are already enrolled in a conservation program such as Reinvest In Minnesota (RIM) or Conservation Reserve Program. River bottoms, wetlands and other high-quality habitat will also be considered for WIA this year.

Bonuses are added if more than 140 contiguous acres are enrolled, if the land is within one-half mile of existing state or federal hunting land, or if a multi-year agreement is signed. WIA is entering its second year as a pilot program.

“We have had a great response from landowners,” said Marybeth Block, WIA coordinator for the Minnesota Department of Natural Resources (DNR). In 2012, 140 sites were enrolled, totaling 15,000 acres across 21 counties in

southwest Minnesota. In 2013, Block hopes to have a total of 25,000 acres enrolled.

“Studies across the country say that hunter numbers are declining because it’s getting tougher to find places to hunt,” Block said. “WIA is one way to address this, while also rewarding landowners for keeping their land in high quality habitat.”

Fischer said it is important for landowners to know that enrollment in WIA is voluntary, and recreational use laws provide extra liability protection for WIA acres. Landowners can opt out of the program in 5 days by notifying the state and returning the boundary signs.

WIA land is for public hunting only. No target practice, trapping, dog training, camping, horseback riding or fires are allowed. No vehicles are allowed on conservation land. Parking is along roads or in designated parking areas. Once private land is enrolled in the program, bright yellow-green hexagon signs are placed at the property boundaries.

Sign-up for WIA will start February 1st. Contact the Pope County SWCD office for more information at 320-634-5327. For maps of the 21 counties enrolled in the program and other WIA information, visit www.mndnr.gov/walkin. Locations of parcels enrolled for 2013 will be on the website in August.



NRCS ACCEPTING APPLICATIONS FROM MINNESOTA FARMERS FOR KEY CONSERVATION PROGRAM

Glenwood, MN, Dec. 28, 2012 – The U.S. Department of Agriculture’s (USDA) Natural Resources Conservation Service (NRCS) is accepting applications to help producers improve water and air quality, build healthier soil, improve grazing and forest lands, conserve energy, enhance organic operations, and achieve other environmental benefits.

NRCS has directed almost \$23.7 million in financial assistance for fiscal 2013 to help Minnesota producers implement conservation practices through the Environmental Quality Incentives Program (EQIP), the agency’s largest Farm Bill conservation program. Interested producers should visit their local NRCS service center for information on EQIP sign-up periods.

“The Environmental Quality Incentives Program offers farmers, ranchers and forestland managers a variety of options to conserve natural resources while boosting production on their lands,” Conservationist Melissa Behrens said. “This \$23.7 million conservation investment helps improve environmental health and the economy of Minnesota’s rural communities.”

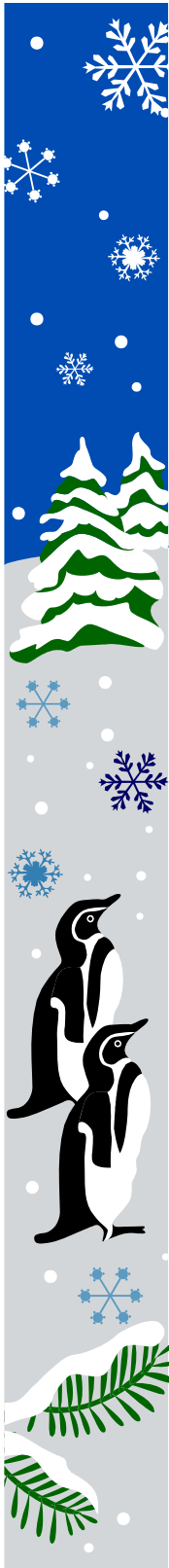
EQIP provides financial assistance for a variety of

conservation activities, such as irrigation water management, reduced tillage, field buffers, rotational grazing systems and much more. The deadline for the next signup period in Minnesota is January 18, 2013. Additional signup deadlines include: February 15, 2013; March 15, 2013 and April 19, 2013.

Additionally, NRCS offers special initiatives through EQIP, including: On-Farm Energy Initiative: helps producers conserve energy on their operations. Seasonal High Tunnel Initiative: helps producers install high tunnels designed to extend the growing season into the cold months, increase productivity, keep plants at a steady temperature and conserve water and energy. Organic Initiative: helps producers to install conservation practices on certified organic operations or those working toward organic certification.

To participate in EQIP, an applicant must be an individual, entity or joint operation that meets EQIP eligibility criteria. Applicants can sign up at their local NRCS service center.

For more information about EQIP or other technical or financial assistance programs offered by NRCS, please contact your local service center in Glenwood.



CONSERVATION PRACTICES THAT SAVE: CROP RESIDUE MANAGEMENT

A producer can save at least 3.5 gallons of fuel per acre by going from conventional tillage methods to no-till. At November 2005 diesel prices, this amounts to \$7.70 per acre in production cost savings. On a farm with 1,000 acres of cropland, these savings add up to 3,500 gallons of diesel fuel per year valued at \$7,700.

Currently, no-till is practiced on over 62 million acres. If the amount of no-till acreage doubled, farmers could save an additional 217 million gallons of fuel, valued at over \$480 million.

No-till is a conservation practice that leaves the crop residue undisturbed from harvest through planting except for narrow strips that cause minimal soil disturbance. Crop residues are materials left in an agricultural field after the crop has been harvested. These residues include stalks and stubble (stems), leaves and seed pods.

Good management of field residues can increase efficiency of irrigation and control of erosion. No-till can be used for almost any crop in almost any soil and can save producers labor costs and fuel. It's a sound



CONSERVATION TILLAGE SYSTEMS HAVE AT LEAST 30 PERCENT OF LAST YEAR'S CROP RESIDUE ON THE SOIL AT PLANTING. RESIDUE ADEQUATELY CONTROLS EROSION BY BOTH WIND AND WATER, AMONG OTHER CONSERVATION BENEFITS.

investment for the environment and the farm.

In addition to energy efficiencies and cost savings, no-till has several environmental benefits. No-till increases the organic matter in the soil, making it more stable and helping prevent soil erosion. No-till reduces greenhouse gases because it requires less fuel and sequesters (stores) carbon in the soil. Other benefits of using no-till as part of a resource management system include:

- Increased earthworm populations that improve soil quality, an average of 540,000 earthworms per acre versus 285,000 in conventional tillage;
- Increased water infiltration, cutting evaporation and runoff by at least 70 percent;
- Reduced tilling time per acre, by as much as two-thirds; and
- Improved wildlife habitat.

NRCS supports conservation practices that save producers money and improve the environmental health of the Nation. For more information on energy saving conservation practices, visit the NRCS "Save ENERGY, Save MONEY" Web site at www.nrcs.usda.gov.

WHAT ARE TMDL'S?

There have been a lot of meetings, conversations, and articles about impaired lakes, TMDL's, BMP's and phosphorous over the past three years. So what does that all mean? How does it all relate? The Federal Clean Water Act requires states to set water quality standards declaring how much of a pollutant can enter a water body and still have the water body meet its designated use. Every two years, states are required to monitor lakes and report whether they meet the state standard. If a lake does not meet the standard it is listed as impaired and placed on the 303(d) list, also known as the "impaired waters list". Lakes on this list are required to conduct a Total Maximum Daily Load study or TMDL. A TMDL is conducted through extensive research of each lakes watershed, the land use within the watershed, aquatic vegetation, examination of point-source pollution (Waste Water Treatment Facilities, Industrial Discharge, NPDES Feedlots), and non-point-source pollution. The result of a TMDL is an amount of the pollutant that can enter the water body each day (or year) and still meet Minnesota standards.



The pollution of concern in Pope County is phosphorous. Phosphorous is contained in soil, plants, animal tissue, and wastes excreted by humans and animals. When phosphorous enters a lake, algae uptake the nutrient and cause blooms and turn lakes green. For every pound of phosphorous that enters a lake, 500 pounds of plant growth (algae) is a result. Unlike Nitrogen which can leach through the soil layer, phosphorous is typically attached to soil particles and is transported with soil movement. However, soils heavily saturated with phosphorous will allow the phosphorous to become dissolved and move with water flow. It is important to keep soil on our landscape and out of our waterways. This can be done through activities determined as Best Management Practices, or BMP's. The list of BMP's for the Pope County Impaired Lakes contains but is not limited to stream bank stabilization, vegetated buffer strips along water bodies, nutrient management, native lakeshore restoration, conservation tillage, open tile intake conversions, and more. Practices that keep soil on the landscape by slowing water velocity are solutions to keeping lakes in Pope County off the impaired waters list. Please call Pope Soil & Water Conservation District for assistance in the installation of the practices listed above at (320) 634-5327.



POPE SWCD RECIEVES GRANT MONEY AND ANNUAL REPORT

Pope County Soil and Water Conservation District (SWCD) received funding for two grants from the Board of Soil and Water Resources. The grants are for upgrading septic systems and for accelerated implementation. The septic grant is for low income households where the existing system is a health threat. Pope County Land and Resource will administer the grant. \$63,560 was awarded for this septic grant. The accelerated implementation grant is to develop projects for the next grant cycle. Pope SWCD received \$30,000 to work with landowners to find conservation projects to compete in the 2013 funding cycle. The SWCD has the best chance of getting funded for projects when there is a complete plan ready to implement.

Pope SWCD will complete an annual report and summary of the Districts 2012 conservation operations and accomplishments. The report will be available in its entirety on the SWCD website: popeswcd.org on or before March 15, 2013. If you have questions about the report or any of the SWCD programs and partnerships contact the office at 320-634- 5327.



IRRIGATION WATER MANAGEMENT SERVICES AVAILABLE

The Pope Soil & Water Conservation District in the interest of sound irrigation management will offer the Irrigation Scheduler Management Program for the 2013 season. The Irrigation Scheduler Management Program is designed to give the farmer a second opinion on in-field moisture status that can assist the farmer on when to irrigate. **THE DECISION TO IRRIGATE IS STILL UP TO THE FARMER.** The success of the Scheduler Project depends on the working relationship between the farmer and the technician. The farmer needs to notify the SWCD office of weekly irrigation and rainfall amounts, emergence dates, spraying dates (when pesticide application may restrict re-entry), and harvesting dates. In return the technician will provide weekly estimated soil moisture graphs.

SERVICES PROVIDED:

- 1) Provide weekly visits to check soil moisture
- 2) Furnish weekly computer soil moisture graphs

3) Provide a year-end summary (graph) showing irrigation total(s), rainfall amounts, and potential leaching events. (This will also help with DNR Waters Year End Reporting requirements.)

4) Conduct Uniformity Checks (This is a test to see if water is being applied uniformly across the field. It can help pinpoint issues such as failing nozzles.)

The cost for the Irrigation Scheduler Service is \$250 per field per year. (Note: The SWCD defines a field as having only one crop on it.) The cost of a Uniformity Check is \$50 per time. For more information on the Irrigation Scheduler Management Program or to sign up for the service contact the Pope SWCD office. Any operators that would like to run this program on their own can pick up a CD with the program on it and receive guidance on how to use the program free of charge.



PLANT CORNER: TO PLANT OR NOT TO PLANT? & BROWN CONIFERS

This quarters plant corner is from the plant materials center in Bismarck, ND. Some good information as we start to think about spring plantings.

To Plant or Not To Plant?

That is the question many are asking after this incredibly early and warm spring. At Bismarck, we saw trees with leaves in late March and geese headed north earlier than usual. North Dakota experienced the warmest March on record, and the 7th warmest winter (to date). Historical records reveal late frosts (May 20th or later) in all of the 10 warmest winters. Will it happen again? It is likely.

Cool-season grasses can generally be planted in April with no major problems. Warm-season species should not be planted until May.

The best time to plant trees is after danger of a hard freeze is past. The effect of frost or a hard freeze on newly planted trees depends on the health of the tree and weather and maintenance throughout the growing season. If trees have been delivered and proper storage is not possible, go ahead and plant them now. If dormant, they should adapt to local conditions. If they have broken dormancy, the new growth may be killed by light frost, but healthy trees planted on the proper site should survive the frost and send out a second flush of leaves. A hard freeze (< 20°) on newly planted trees will set them back and weaken the tree. Species that are more susceptible to cold temperatures, trees in poor health, and trees planted on improper sites will likely be killed by a hard

freeze. It is generally better to plant dormant trees early with potential for light frost rather than later with a certainty of hot, dry, windy weather.

Planting in summary:

- Early planting advantages are more available moisture, less transpiration and longer period of cooler temperatures.
- Early planting disadvantages are greater frost risk, possible dieback, or death.
- Smaller bare root trees and shrubs are generally more susceptible to injury than larger or potted material.
- Trees and shrubs planted into a cover of dead thatch or standing stubble will remain dormant longer and experience less frost damage than those planted on bare soil, through fabric, on south aspects, or drier soils.
- Species on the northern edge of their native range are more susceptible to frost injury from early dormancy break.
- Dormant stock will fair better than stock that has broken bud or leafed out.

Brown Conifers

Throughout the upper Great Plains, many spruce, pine, and junipers are showing brown and purplish brown needles. The apparent cause is related to weather. Collectively, the cool, wet spring and early summer; the extremely dry, late summer and fall; and the open, warm winter have caused the currently



visible needle discoloration and tree death. Several years with above normal precipitation and the cool weather of spring 2011 resulted in water closer to the surface. High water at some locations caused root drowning or carried additional salts that affected the health of the tree. These conditions resulted in dead trees and discolored needles.

The winter weather-caused discoloration may or may not kill the tree. If an otherwise healthy conifer tree has a small portion of purplish brown needles, the tree will likely survive given a normal growing season. Trees with a large portion of discolored and dead needles are more severely stressed and are more likely to die.

The degree of needle discoloration and death is also affected by the genetics of the plant. One plant may show discoloration or death while another is healthy within a planting with fairly uniform conditions.

Ways to reduce stress on trees:

- When the top 6" of soil are dry to touch, irrigate with good quality water sufficient to add 1" of water within the drip line area. Do not overwater. Trees over 5 years old generally only need watering every other week.
- Avoid mechanical damage to trees (tillers, mowers, livestock, etc).
- Control weeds within the area of the tree roots.
- If mulch or weed control fabric is not used, control erosion from tillage or chemical weed control application.

Do not remove the brown evergreen trees until fall. They may grow out of the needle damage. Don't be surprised, however, if a few severely affected trees die and need to be removed.



Grazing Lands Conservation and Management

Grazing Conservation Lands

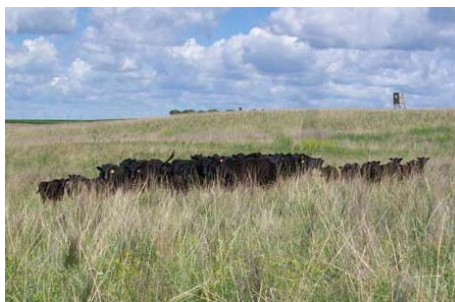
Over the past few years, there has been a lot of buzz amongst conservation land managers regarding the use of grazing as a wildlife habitat and plant community management tool.

Historically, grazing was one of the driving forces that shaped the native grasslands of Minnesota and the Great Plains and many land managers are realizing the importance that grazing can have as a part of a management plan. This past August 21st and 22nd, over 200 natural resources professionals and livestock producers from Minnesota, South Dakota, and North Dakota came together at Dakota Magic Casino in Hankinson, North Dakota to discuss the utilization of grazing as a management tool on conservation and wildlife lands. The following provides a brief discussion into the benefits of grazing for plant community maintenance and improving wildlife habitat.

Grazing and Wildlife

Many studies have been conducted that show both positive and negative effects of grazing on various wildlife species². The key to utilizing livestock grazing as a grassland health and wildlife management tool involves identifying the goals and desired outcomes of the management practice. No matter what management action is taken (burning, grazing, haying, idling, etc.), the action will result in benefits to certain species at the expense of other species (both plant and animal). Many researchers have concluded that a diversity of habitats and management across the landscape is needed to support a wide array of wildlife species²⁻¹⁰. In addition, evidence exists that describe the benefits of using grazing as a management tool to increase habitat

heterogeneity across the landscape for wildlife species ranging from grassland birds (including waterfowl) to mammals², 11-13. For example, many grassland bird species utilize a wide range of grassland cover types, ranging from heavily grazed to relatively undisturbed¹³⁻¹⁸.



Grazing and Plant Community Maintenance

Grazing can be a powerful tool to manage plant communities. Without periodic disturbance, woody encroachment often occurs in the prairie landscape^{13, 19, 20}. In addition to woody plant encroachment, introduced cool season grasses invade into prairie seedings and native rangeland over time in areas excluded from periodic disturbance²¹. Properly timed grazing can be used to manage these invasions. Recent research has also indicated that grazing can improve species diversity in the tall grass prairie over ungrazed areas^{1, 11}.

Final Discussion

Specific grazing treatments can achieve management objectives for improving plant communities and diversifying wildlife habitat across the landscape. The keys to successful grazing involve identifying management objectives and implementing an adaptive

management plan that will allow for changes based upon results of previous treatments and as changes to objectives are made. The potential benefits of grazing conservation lands would also include benefits to private lands as well. Most private pasture is managed in a continuous grazing situation and is often overgrazed. Periodically grazing conservation lands (which may include public grasslands, conservation easements, etc) for the purpose of plant community maintenance and habitat improvement may also provide much needed rest for private pastureland. In most cases, private pastureland receives little opportunity for extended rest periods, thus grazing other lands would improve the health of the pasture and potentially provide for better wildlife habitat.

Before grazing conservation land, a few questions need to be considered. What are the objectives for the property and how can grazing be used to achieve those objectives? Are livestock operations present in the vicinity to graze? Will the livestock operators be willing and able to follow the management plan? Can the land manager and the livestock operator work cooperatively together so that both sides can achieve their goals? Other questions will arise over time that will need to be addressed. Utilizing grazing as a land management tool may not apply to every situation; however, the conditions may exist to utilize livestock grazing as a viable management tool. To learn more about the use of grazing (and other disturbances) for plant community maintenance and improvement of habitat diversity, please contact the Glenwood field office for a list of references.

If you have any thoughts, suggestions, or have specific topics that you would like covered, please contact Jeff Duchene @ 218-346-4260 Ext. 101 or jeff.duchene@mn.usda.gov.



BOWER RETIRES FROM NRCS, PETERSON LEAVES & PEDERSON JOINS SOIL & WATER BOARD

Along with the new year comes some new changes. After nearly 30 years working with NRCS Craig Bower (pictured right) decided to move on to new endeavors. Craig has been in Pope County since 1988 prior to working in Glenwood where he worked in Redwood Falls, MN and Audubon, IA. We asked Craig for some parting advice and he said "Throughout my career I have always found that conservation pays." Watch the spring newsletter for news on Craig's replacement.

After serving on the Pope County Soil and Water Conservation board for 8 years Ralph Peterson (pictured left) has decided to hang up his hat. Ralph was an outstanding representative for the SWCD as he

also served on the Resource Conservation & Development board (RC&D). Through the RC&D board Ralph was appointed to work on the Glacial Ridge Scenic Byway. Ralph was also president of Area 2 SWCD's through this position he also served on Minnesota Association of Soil and Water Conservation Districts or the state association for SWCD's.

NRCS and Pope SWCD would like to congratulate and wish the best of luck to both Craig and Ralph on there new endeavors!

Pope SWCD would also like to welcome Randy Pederson (not pictured) to the board. Randy owns a Chiropractic Business here in Glenwood. He will be filling Ralph's position on the board.



POPE SOIL & WATER



CONSERVATION DISTRICT

1680 Franklin St North, Glenwood, MN 56334

PHONE: (320) 634-5327

FAX: (320) 634-4278

www.popeswcd.org

Name: _____

Address: _____

City, State Zip: _____

Date: _____

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 November 10th for 2011 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!

ITEM	PRICE	#ORDERED	AMOUNT
SHRUBS (All Bare Root) priced per bundle of 25 Trees			
Buffaloberry	\$25.00		
Chokeberry, black	\$30.00		
Hazlenut	\$25.00		
Hi Bush Cranberry	\$30.00		
Juneberry	\$25.00		
Nanking Cherry	\$25.00		
Peking Cotoneaster	\$25.00		
Redosier Dogwood	\$25.00		
Sand Cherry	\$25.00		
Villosa Lilac	\$25.00		
Common Lilac	\$25.00		
LARGE TREES (All Bare Root) priced per bundle of 25 Trees			
Siouxland Cottonwood	\$25.00		
Hackberry	\$25.00		
Rooted Hybrid Poplar	\$25.00		
Bur Oak	\$25.00		
Silver Maple	\$25.00		
Sugar Maple	\$25.00		
American Linden Basswood	\$30.00		
SMALL TREES (All Bare Root) priced per bundle of 25 Trees			
American Plum	\$25.00		
Common Chokecherry	\$25.00		
Red Splendor Crab	\$25.00		
EVERGREENS priced per bundle of 25 Trees			
Black Hills Spruce	\$30.00		
Colorado Blue Spruce	\$30.00		
Ponderosa Pine	\$30.00		
American Arborvitae (White Cedar)	\$30.00		
Red Pine (Norway Pine)	\$30.00		
POTTED EVERGREENS (other varieties of evergreens available upon request)			
Black Hills Spruce	\$10.00 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		

Trees Ordered: _____

Page Total: \$ _____

****Conservation Grade Trees Must Be Ordered in Minimum Quantities of 25 unless otherwise noted.**

See Reverse Side for Tax.

POPE SOIL & WATER



Last Name: _____

ITEM	PRICE	#ORDERED	AMOUNT
TREE CARE			
Tree Shelters 4' height (biodegradable tubes-no assembly required)	\$3.00		
Wood Stakes 4' height	\$0.90		
Weed Control Mats 3x3 w/ 8 staples (some 4x4 weed mats available)	\$2.50		
Bulk Roll of Weed Fabric 500'	\$150.00		
Staples/500 per box (Anchor Pins)	\$40.00		
Flags-100 per bundle \$0.10 each	\$10.00 per bundle		
SERVICES -- All Services have a \$75.00 one time service charge			
Custom Installed Weed Fabric	\$0.50 per foot		
Custom Tree Planting (\$100 minimum charge)	\$0.50 per tree		
Custom Mowing	\$50.00 per hour		
Custom Cultivation	\$75.00 per hour		
Custom Grass Seeding ATV	\$50.00 per hour		
Custom Grass Seeding No-till Drill	\$20.00 per acre		
Custom Spraying ATV (plus required chemical)	\$50.00 per hour		
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)	\$8.00 per acre		
Packer (minimum charge of \$75.00)	\$2.50 per acre		
GRASS SEED MIXES priced per acre (Custom mixes available upon request)			
<u>50% DOWN REQUIRED ON ALL GRASS SEED ORDERS TO SECURE PRICING.</u>			
CP25 (15 specie mix) Dry & Wet Mixes Available	<i>Call for Pricing</i>		
CP21 Basic Switchgrass	<i>Call for Pricing</i>		
CP21 Variety Mix Switchgrass, Big Bluestem, Indiangrass, Sideoats grama, Purple Prairie clover	<i>Call for Pricing</i>		
Tree Mix Per. Ryegrass, Annual Ryegrass, Timothy, Tall Fescue, Kentucky Bluegrass	<i>Call for Pricing</i>		
645 Standard Wet Mix Indiangrass, Big Bluestem, Switchgrass, Canada Wildrye, Purple Prairie Clover, Yarrow	<i>Call for Pricing</i>		
645 Standard Dry Mix Big Bluestem, Sideoats grama, Indiangrass, Slender Wheatgrass, Western Wheatgrass, Purple Prairie Clover, Yarrow	<i>Call for Pricing</i>		
*Planning and Design service with on-site visit. (FREE) *Trees sold are for conservation purposes only. *SWCD cannot guarantee survival rate of trees. *SWCD reserves the right to substitute sizes or cancel species due to availability. *A 25% down payment is required on all orders at the time of the order. All orders after March 1st 2012 must be paid in full at the time of the order. All balances due by April 1st, 2012. Orders Cancelled after February 1st, 2012 will be charged a 25% cancellation fee. *10% Off Tree Orders sent in by November 10th, 2011.		Total This Side : _____ Total Front Side : _____ Subtotal : _____ 6.875% Sales Tax : _____ Total Order Cost : _____ Paid : _____ Balance : _____	

Pope SWCD prohibits discrimination in all their programs and activities on the basis of color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status.

CONNECTING CORRIDORS: WHAT THEY MEAN TO WILDLIFE

As you think about the needs of wildlife, it can often help if you put yourself in their place, as best you can. That's true when you think about the value of wildlife connecting corridors. If you were a wild animal or bird, given the choice, you would probably spend most of your time in a larger patch of habitat rather than a smaller one. And, you might well need to move from one habitat patch to another, searching for water or new or fresh food. But you'd want to do it over, behind or through some protective cover, hidden from predators, wouldn't you? That's where connecting corridors are valuable for wildlife.

Connecting corridors are the strips of grass and/or shrubs and trees that connect larger habitat areas-- whether they be wetlands, native grasses, woodlands, or other habitat. In recent years, interest in connecting corridors has grown because wildlife corridors are seen as ways to allow wildlife and plants to spread across natural landscapes that have been cut into pieces by roads, development, logging or other land disturbances.

The corridors allow animals to find new resources and prevent isolation of species. Studies have shown that wild areas connected by corridors have more wildlife or greater biodiversity than disconnected fragments. There is some concern about corridors entrapping some wildlife species, since predators can more easily find their prey in a narrow strip of habitat. For that reason, the wider the corridor, the better.

In most situations, landowners creating corridors may want to consider a design that is edge feathered, which includes zones of grasses, shrubs and trees all in the same corridor. The center of the corridor would be planted to trees, with strips of shrubs on each side, bordered on the outside by zones of grasses and legumes. This combination offers habitat for wildlife that may use all three types for food and cover, as well as wildlife that needs only one of the habitat types. For more information stop by our office at 1680 Franklin Street in Glenwood.



Riparian, or streamside, plantings of trees, shrubs and grasses make excellent connecting corridors. They can sometimes be a wildlife oasis in a sea of crop fields.



Notes from the Ag Consultant: Proper Storage of Silage

Every year we need to remind people of requirements for stockpiling. If you need a refresher, check out some of our past articles on the Pope SWCD website. This time we are going to talk a bit about a different type of stock piling, silage. Did you know that Silage must also be considered under MPCA guidelines? We are going to try to highlight a few main points from the MPCA guidance sheet (wq-f8-20).

What are we most worried about with silage? Leachate. Leachate is excess moisture from silage and it can be managed. Leachate is very potent and can lower oxygen levels in surface water to a point that fish can not survive. So the first thing you should know is **“Anyone who stores 1,000 tons or more of sweet corn silage at any one time must obtain a permit from the Minnesota Pollution Control Agency (MPCA).”** Sweet corn silage has higher moisture content and therefore generates higher leachate. It is also more acidic.

Secondly, you should know that if you want to construct a storage area you need a permit for that. **“In general, a permit or permit modification is only necessary for construction or expansion of a feedstock storage area for feedlot sites required to maintain coverage under a feedlot NPDES/SDS permit. The applicable permit must be obtained prior to starting construction of any type of feed storage area at a NPDES/SDS permitted feedlot site.”** This includes all kinds of feedstock silage. **“Concrete, synthetic, or earthen lined storage leachate basins or tanks located at a feedlot, must be designed by a professional engineer in accordance with Minn. R. 7020.2100.”**

Lastly, you are allowed to land apply leachate. “Land application of all types of leachate is allowed if it is applied at rates that do not exceed the nutrient requirements of the crop and all manure application requirements of Minn. R. 7020.2225 are followed.” We also included the list of best management practices regarding this topic.

Best Management Practices

Regardless of the need for permit coverage, the following practices should be implemented to reduce the potential for silage leachate discharging to waters.

- Locate the feed storage area on flat ground away from surface waters such as streams, ditches, tile inlets, wetlands, and intermittent streams.
- Wells should be located at least 100 feet from silage stockpiles and leachate storage areas.
- Establish the feed storage area on concrete, asphalt or a soil with at least one foot of soil categorized by NRCS practice standard 313 as group III or IV. *(Two feet of soil should be used in sensitive areas such as those with shallow depth to fractured bedrock.)*
- Locate stockpiles on soils that have a minimum of three feet to the seasonal high water table and five feet to bedrock unless concrete or asphalt is used.
- Divert all surface water runoff away from the storage area to prevent contamination or co-mingling of surface water and leachate.
- Cover silage with plastic to prevent precipitation from entering the stockpile and creating leachate.
- Install a leachate collection system, such as storage tank or basin. *(A permit is required.)*
- Harvest silage at a moisture content of 65 percent or less.
- Plant shorter maturity varieties of corn to produce a drier crop and, therefore, less leachate volume.
- Add dry materials to silage to absorb excess moisture to create less leachate volume.

POPE SOIL & WATER



CONSERVATION DISTRICT

1680 Franklin St North
Glenwood, MN 56334

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"To appreciate the beauty of a snowflake, it is necessary to stand out in the cold."



Author
Unknown

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Visit us on the web at popeswcd.org.

Did you know.... owls have the best hearing of all birds. They fly silently at night; even though many owls live their entire lives near people, they are seldom seen. It is illegal to capture or kill an owl.

IMPORTANT DATES

- January** 1 New Years Day
21 Martin Luther King Day
- February** 18 Presidents Day
14 Valentines Day
- March** 10 Day light Savings Begins
17 St. Patrick's Day

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



USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

"Helping People, Help the Land!"