



Bridging the Gap

Your link to natural resource topics affecting Lake of the Woods County.

Winter 2012
Volume 7, Issue 1

Celebrating Our Successes of 2011



.....Since 1952

Soil conservation continues to be a focal point of the District. In 2011, the SWCD began a partnership with Koochiching SWCD to expand Boise's Beneficial Reuse of Wood Ash Program to include most of LOW. Wood ash can be used as a fertilizing agent to increase field productivity. Read more about this on **page 2**.

Water quality protection is at the forefront of the SWCD's mission. One of the ways we work to protect water quality is through our Drinking Water Protection Program (*details in box to the right*). We are also currently aiding the MPCA in several efforts to monitor water quality and implement best management practices. Read more about our partnerships with the MPCA on **page 7**.

Conservation education is vital to preserving our local wealth of resources. As part of these efforts, we are active partners in the School's River Watch Program and the School Forest Program. **Page 3** highlights some of the 2011 achievements of the School Forest Committee.

District involvement in conservation efforts means that you will continue to have local representation. Currently, the SWCD is part of an international effort to protect the water quality of Lake of the Woods. Read more about these efforts on **page 7**.



Students from Jenny Moorman's 4th grade class helped spread seed on the earthen berm at the school's wetland restoration site.

Read more about this project on page 3...

Our Drinking Water Protection Program Accomplishments

- Each fall for the past seven years we have offered a low-cost well testing clinic to area residents. This is the only clinic like this in LOW County.
- To increase our coverage we sponsored a special well testing clinic at the Northwest Angle in 2011.
- Our cost share program provides up to \$300 per well to seal abandoned wells, totaling around \$2500 disbursed annually.

Conservation Corps crewmembers are pictured relocating lady's-slippers from the path of Hwy 11 reconstruction.

The SWCD partnered with MNDOT, Conservation Corps of MN, DNR staff, local gardener club members and citizen volunteers to mark and relocate over 1100 orchids.



Wood Ash Available for Lake of the Woods Ag Fields

District Supervisors

Marshall Nelson,
Chairman
Roger Krause,
Vice-chair
Russel Hansen,
Treasurer
John Sonstegard,
Secretary
Scott Pieper,
Public Relations

District Employees

Josh Stromlund,
*County L&WP and SWCD
Director*
Mike Hirst,
Resource Technician
Corryn Trask,
Resource Technician
Matt Delaney,
*Summer Trainee, Conserv-
ation Corps of MN*

USDA Natural Resource Conservation Service Partners

Kelly Voigt,
District Conservationist
Brooke Knick,
Conservation Technician

Mission Statement

"The purpose of the District is to provide for the adoption of sound water quality, proper land use, and soil conservation practices on all lands in the District, to assist with the development of a prosperous agricultural economy, and to foster other community development for the general welfare and security of the people of the District."

EEO—All programs of the Lake of the Woods Soil and Water Conservation District, USDA, and NRCS are offered on a non-discriminatory basis without regard to race, color, national origin, religion, sex, age, marital status or handi-cap.

A large part of Lake of the Woods County is now eligible for land application of wood ash. Through a cooperative effort between the Lake of the Woods and Koochiching SWCDs, the delivery range has been extended up to 90 highway miles from the Boise mill.

Boise's Mill #2 produces around 65 tons per day of ash through burning wood waste and residuals from its onsite wastewater treatment plant. This ash typically would have to be hauled to a landfill, but, in 1998, Boise began a program to land-apply ash to agricultural and forested lands. To date, the land-application process has kept over 163,000 cubic yards of ash out of the landfill.

Wood ash has shown to be a valuable agronomic product. Farmers see significant increases in crop yields following application. The ash demonstrates high calcium content, plus noticeable amounts of boron, sulfur, phosphorous, and potassium. Justin Berg, from Koochiching SWCD, explains the effects of fertilizer vs. wood ash by stating that "fertilizer increases the amount of certain nutrients in the soil, whereas wood ash makes already existing nutrients more available for uptake."

"Farmers see significant increases in crop yields following application."



Interested applicants in Lake of the Woods County need to make arrangements to spread the wood ash. Free spreading services through the program are not available in LOW County.

General program participation requirements:

- **Delivery range-** 90 mile delivery range (road miles) from International Falls.
- **Spreading-** participants in Lake of the Woods must be able to spread their own ash.
- **Active-** fields must be pastured or actively farmed.
- **Soil Requirements-** current soil sample report with a pH level of 7.1 or below.
- **Access-** field access must accommodate a semi-truck.
- **Size-** minimum field size is 15 acres.
- **Setback-** fields must meet setback requirements: 200' from a residence; 600' from residential developments; 600' from recreational areas; 200' from a private well; 1000' from a public well.
- **Waste applications-** fields that have previously received municipal sludge are not eligible.
- **Ownership-** operators/occupiers must have a release form signed by the owner.

This is just the beginning...

If the program experiences success in Lake of the Woods, we may explore options for extending the delivery range to encompass the entire county.

For more information

Brochures, delivery range maps and applications are available at the Lake of the Woods SWCD & online at www.lakeofthewoodsswcd.org on the "Programs and Services" page.

(Credit for portions of this article go to the Boise White Paper, LLC. Ash Management Plan)

Rain Gardens...functioning flowers

What is a rain garden?

A rain garden is a shallow constructed depression that is planted with deep-rooted native plants.

Rain gardens are most often used in developed or urban settings with impervious surfaces, such as roofs and parking lots, that don't absorb rain water.

Rain gardens slow down the rush of water and hold it for a short period of time, allowing it to naturally infiltrate into the ground.

Why create a rain garden?

They **slow** water- runoff surges can impact creeks and lakes by eroding banks and scouring bottoms.

They **filter** water- stormwater can carry oil and grease from cars, fertilizer runoff, and excess organic debris.

They **cool** rainwater- rainwater is often heated by pavement and roofs. This warm water can be harmful to aquatic life in our lakes and streams.

Buffers and Field Borders

Update from the Water Plan Committee, Mike Hirst

The Lake of the Woods Water Plan Committee met last October to discuss the priorities and tasks to accomplish in 2012. The water plan committee is made up of county, SWCD, cities, state agencies and local landowners representing interests from agriculture to the resort community.

One of the priorities set by this group was to promote and educate landowners the importance of field borders and set backs from public drainage ditches. The consensus from the committee was that buffers are more of a priority now due to the trending change of crop commodities from grass seed to soybean production.

In 2012 and years to come, look for: educational meetings, tours, presentations from outside parties, trainings, workshops, demonstration projects, county board discussions on ditch assessments, and/or enforcement of public right of way.

Volunteers contributed time and tools to install a rain garden at the Baudette Depot. This project will help drain rainwater away from the building and temporarily store it for plant uptake. Cost share for native plants and materials was provided by the SWCD's Cost Share Program.



School Forest Updates

The SWCD is working with the Lake of the Woods K-12 school to advance outdoor learning opportunities. Since enrolling the 112-acre site immediately adjacent to the school into the DNR School Forest Program in 2009, the School Forest Committee has made great strides towards making this area more accessible for students and teachers.

These are just some of our most recent accomplishments:

- ★ Replaced topsoil and seeded 6-acre site to reclaim an old borrow pit
- ★ Constructed a boardwalk to access the wetland area
- ★ Built an outdoor classroom, complete with teacher's podium and seating for students
- ★ Secured funding to install a trails kiosk and interpretive signs
- ★ A curriculum committee has developed ready-to-use learning materials and worksheets



Students are using this area on a weekly basis. If you would like to learn more, feel free to contact Corryn at the SWCD office or Jenny Moorman, the School Forest Coordinator.



Conservation Practice Spotlight

European Buckthorn... a yard ornament gone bad

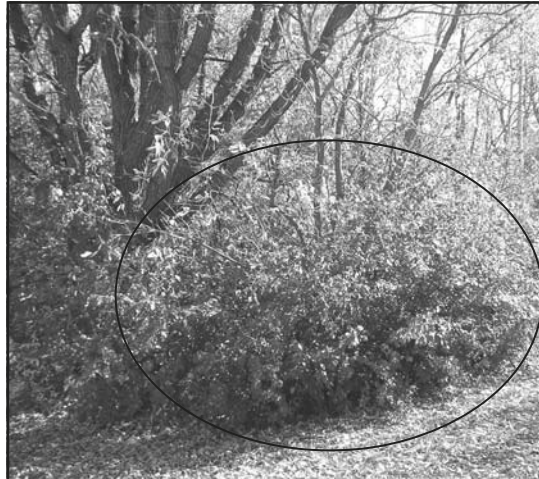
European buckthorn is a non-native shrub that was once commonly planted as an ornamental tree.



Buckthorn gets its latin name “*Ramnus cathartica*” from the root ‘catharsis’ meaning laxative. The numerous black berries produced by this tree are great food for birds, but because of this laxative effect, are quickly expelled. Almost as quickly, these seeds begin taking root, germinating in all types of soils types and conditions. Once established, buckthorn will begin to choke out other trees and shrubs, creating a thick monoculture.

Buckthorn is also a host to diseases which impact wheat and soybeans crops.

You can help battle buckthorn. We can assess your property for buckthorn, free of charge. Financial assistance is also available for removal.



The understory of this oak woodlot is solid buckthorn. Buckthorn secretes chemicals that prohibit the growth of other plants. The ground beneath the buckthorn is bare dirt, eliminating competition for buckthorn seedlings.

Buckthorn becomes so thick that access is nearly impossible, making cutting and piling necessary.

This photo, showing a mound of buckthorn, is a testament to the tremendous amount of work it takes to remove buckthorn once it has taken over.



Wetland Banking

What is the purpose of wetland banking? The purpose of the state wetland banking system is to provide a market-based structure that allows for replacement of impacted wetlands with pre-established replacement wetlands. Simply put, it allows an individual or entity wishing to fill or drain a wetland to purchase wetland credits from someone who has restored or created a wetland.

Why wetland banking is needed? Under the current wetlands regulations in Minnesota, wetland replacement must replace the public value and function of wetlands lost as a result of an impact. Since on-site replacement is often impractical, the wetland banking system helps connect landowners who have already established a successful wetland bank with those who need to replace wetlands they plan to impact.

How to get started? Wetland banking may be a viable option for private landowners that wish to preserve, create or restore wetland functions. The first step for anyone interested in establishing a wetland bank is to contact the Land and Water Planning Office or the SWCD.

Lake of the Woods County recently developed an approximately 640 acre site into a wetland bank. This was accomplished by placing a permanent conservation easement on this tract of land and restricting water flow from this area.

One of the main reasons this site was selected is that it is encompassed within the boundaries of the Graceton Wildlife Management Area (WMA). The public value of this project includes: providing additional recreation opportunities, protection of wildlife and native plant habitats, and water retention benefits to help minimize flooding within the watershed.



2012 Tree Order Form

Lake of the Woods SWCD
 PO Box 217 Baudette, MN 56623 * (218) 634-1842 x3

Office Use

Paid in full? _____

Date _____

Special Order- _____

Name _____ Date _____

(Please Print)

Mailing Address _____

Daytime Phone _____

Species		Size	Price/Bundle	Bundles Ordered	Subtotal	
COMBOS	Wildlife Shrub Combo	various	\$30.00		\$	
	<i>A mix of dogwood, chokecherry, plum, hazelnut, and cranberry</i>					
	Maple Packet	18-24"	\$30.00		\$	
	<i>12 Red Maple and 12 Silver Maple</i>					
SHRUBS	Crab, Red Splendor	18-24"	\$23.00		\$	
	Plum, American	12-18"	\$23.00		\$	
	Chokecherry, Common	18-24"	\$25.00		\$	
	Dogwood, Redosier	18-24"	\$25.00		\$	
	Juneberry (serviceberry)	12-18"	\$25.00		\$	
	Hazelnut (American)	6-12"	\$25.00		\$	
	Cranberry, Highbush	12-18"	\$30.00		\$	
DECIDUOUS	Maple, Red	18-24"	\$25.00		\$	
	Maple, Silver	18-24"	\$25.00		\$	
	Oak, Bur	18-24"	\$28.00		\$	
CONIFERS	Tamarack	6-12"	\$20.00		\$	
	Cedar, White (Arborvitae)	5-10"	\$20.00		\$	
	Pine, Jack (improved)	6-12"	\$20.00		\$	
	Spruce, White (transplants)	8-18"	\$25.00		\$	
	Pine, Norway (transplants)	8-24"	\$25.00		\$	
	Pine, White (transplants)	7-15"	\$30.00		\$	
TREE CARE	Large Fluorescent Pin Flags - perfect for marking your trees to avoid mower accidents					
	Bundle of 25 flags			\$5.00		\$
	Bundle of 100 flags			\$15.00		\$
	Plantskydd Animal Repellant - Organic Deer and Rabbit Repellant, lasts up to 6 months					
	1 lb Granular Shaker (treats 600 sq ft)			\$10.00		\$
	1 qt. RTU Spray Bottle (treats 100 plants)			\$22.00		\$
	1 lb Powder Concentrate (treats 300-400 plants)			\$25.00		\$
	22 lb. Bulk Concentrate (treats 4000-6000 plants)			\$300.00		\$
10% Discount on orders > 500 = _____				Tax and Shipping Included in Price		
				\$		

Trees sold in bundles of 25

Limited quantities available

Prices include tax and shipping

Tree distribution held in Baudette late April/early May. Notices mailed out 2 weeks prior.

Additional delivery information, terms and conditions on reverse.

Total Cost

Tree Specifications

Shrubs	<u>Soils</u>	<u>Moisture</u>	<u>Growth</u>	<u>Minimum Spacing</u>	<u>Comments</u>
Crab, Red Splendor	sandy loam-clay loam	dry-wet	fast	3-8 x 12	beautiful pink spring flower, fruit persists all winter
Plum, American	sandy loam-silty clay	dry-wet	moderate	3-8 x 12	white flowers, creates thickets, great for jams
Chokecherry, Common	sandy loam-silty clay	dry-wet	fast	3-8 x 12	edible berries, white flowers, shade tolerant, grows fast
Dogwood, Redosier	sand-clay	moist-wet	fast	3-8 x 10	white berries, pretty red bark in the winter, can be pruned
Juneberry	sand-silt	dry-wet	moderate	3-8 x 10	low wet areas, spring flowers
Hazelnut	sandy loam-clay	dry-wet	moderate	3-8 x 10	produces nuts, good for naturalizing old fields
Cranberry, Highbush	sandy loam-clay	moist-wet	moderate	3-8 x 10	flowering, berries edible
Deciduous Trees	<u>Soils</u>	<u>Moisture</u>	<u>Growth</u>	<u>Minimum Spacing</u>	<u>Comments</u>
Maple, Red	sand-clay	dry-wet	moderate	8-20 x 16	beautiful fall leaves, will sun scald
Maple, Silver	sandy loam-silty clay	moist-wet	fast	8-20 x 16	large, flood tolerant tree, fast growth
Oak, Bur	sand-clay	dry-wet	slow	8-20 x 16	sturdy, long lasting tree, good for wildlife
Coniferous Trees	<u>Soils</u>	<u>Moisture</u>	<u>Growth</u>	<u>Minimum Spacing</u>	<u>Comments</u>
Tamarack (Larch)	sand-clay	dry-wet	fast	6-10 x 16	beautiful fall color, fast grower and long lived
Cedar, White (Arborvitae)	sandy loam-clay	moist-wet	slow	6-10 x 16	beautiful tree, good wildlife cover, dense foliage
Pine, Jack	sand-sandy loam	dry-moist	fast	6-10 x 16	use in shelterbelts and reforestation and on dry sites
Spruce, White	loam-clay	moist-wet	moderate	8-16 x 20	good windbreak tree, suits many sites
Pine, Red (Norway)	sand-silty clay	dry-wet	fast	8-16 x 20	salt spray intolerant, excellent timber value
Pine, White	loamy sand-clay loam	dry-wet	fast	8-16 x 20	excellent timber tree, soft needles

Plantskydd Specifications: 100% organic plant protection. Applied in spring and/or fall, when browsing is at its worst. Rainfast for 6 months.

Granular shaker—good for vegetable or flower gardens., use for rodent problems, acts as fertilizer as well.

Ready to Use 1 Quart Spray—treats 100, 1-foot tall plants. Premixed in spray bottle for your convenience.

Powder Concentrate 1 Pound Box—treats up to 300, 1-foot tall plants. Cost effective. Requires mixing and sprayer.

Tree Delivery: Pickup in Baudette in late April or early May. You will be notified two weeks in advance of exact pickup time, dates and location. Arrangements for cold, long-term storage must be made *in advance*.

Quantities are limited, orders accepted until stock is depleted. No special orders after March 15th.

Refunds only if desired trees are unavailable. Size may vary depending on nursery availability.

The SWCD is not responsible for tree survival or replacement. **No cancellations after February 15th.**

Due to the perishable nature of tree seedlings, we cannot guarantee survivability or replacement. Tree seedlings must be kept in a cool, moist environment until planted.

Watershed Updates– what’s happening in your watershed?

Comprehensive Assessment of Bostic and Zippel Watersheds

Monitoring and assessment

The SWCD and NRCS Water Resources staff are continuing efforts to pinpoint sources of sediment depositing in the Bostic and Zippel Bays. To help fund intensive monitoring within the watersheds, the SWCD received grants from the MN Pollution Control Agency Clean Water Partnership Program and the NW MN Foundation.

Implementation

A Clean Water Fund (CWF) grant was also received from the Board of Water and Soil Resources. This grant will help fund erosion control measures in areas where there are

identified problems. The SWCD is coordinating with the Public Works Department on these problem areas.

Preliminary results

Results of the study will be available early this spring. The overall goal of this research is to develop a plan of action for protection and restoration of the bays. This data will shed light on how quickly sediment is being deposited and what steps are needed for restoration.

Photos to right. Top Photo: Resource Technician Corryn Trask is using a sonar flow meter to measure flow rates within the ditch channel.

Bottom Photo: Matt Delaney spent his summer in Lake of the Woods through a Conservation Corps Apprenticeship Program. One of his main focuses for the summer was to assist with water monitoring efforts.



District Receives EPA Grant to Quantify Shoreline Erosion

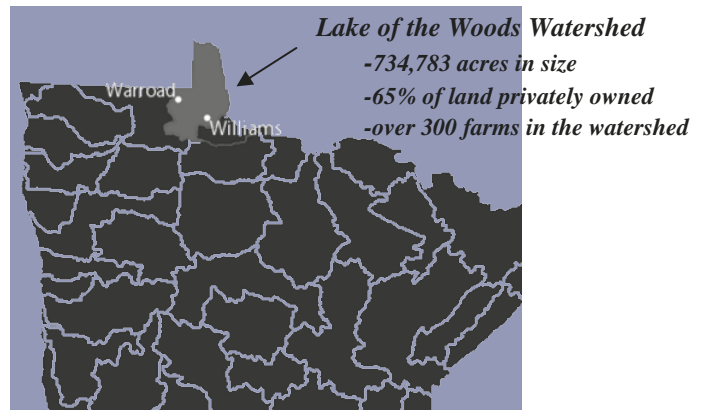
The SWCD received a one-year grant to study the effects of shoreline erosion in Lake of the Woods. The lake has been listed for excess nutrients which cause excessive, and sometimes toxic, algae blooms. A larger-scale TMDL study is scheduled to begin in 2012.

This pre-TMDL study will estimate the rates of shoreline and tributary erosion and quantify how much this erosion is contributing to elevated nutrient levels. This study will provide much needed information for the larger TMDL study.

The SWCD has enlisted the services of Houston Engineering to perform most of the analysis and modeling for the grant. Results of this study will be available September 2012.

Lake of the Woods Surface Water Assessment Roseau and LOW County

Lake of the Woods and Roseau SWCDs are partnering to conduct a 2-year surface water assessment funded through the MN Pollution Control Agency. LOW SWCD will be contracted through the Roseau SWCD to perform monitoring on sites within our county.



Results of water quality monitoring and assessments are public information. In order to help inform the public, the SWCD holds meetings, publishes articles and also posts results of these studies on our website. Local input is important, so please feel free to contact us.



www.lakeofthewoodsswcd.org

PO Box 217, 119 1st Ave NW

Baudette, MN 56623

218-634-1842 ext. 3

218-634-1726 (fax)

2012 Spring Tree Order Forms

Inside this issue & online at

www.lakeofthewoodsswcd.org



NRCS Technician, Brooke Knick and SWCD Technician, Mike Hirst, bagging trees in the Highway Department Garage during our 2011 Tree Week.

Thank You! To all of our local businesses and volunteers who helped make our programs possible.

Caroline's Country Market in Williams for serving as a drop-off point for our well testing clinic.

Deb Kellerman & the Northwest Angle Chamber of Commerce for helping coordinate the NWA well testing clinic.

Young's Bay Resort at the Northwest Angle for being a drop-off point for the NWA well testing clinic.

Deb Beckel for coordinating volunteers to mark lady's-slippers along the Highway 11 construction zone.

Lake of the Woods Master Gardeners for their hard work on the Baudette Depot Rain Garden

Joanne Kellner and community gardener volunteers for their contributions to the Baudette Depot Rain Garden Project.