



Minnesota River Weekly Update

January 8th, 2014

MPCA releases wild rice research reports

The MPCA met the 2013 goal for the Wild Rice Standards Study and has released experiment and monitoring summary reports and data. The goal of the study is to enhance understanding of the effects sulfate has on wild rice and to help decide whether revision of the wild rice sulfate standard is warranted. The study consists of parallel research efforts conducted by scientists at the University of Minnesota campuses in Duluth and the Twin Cities under contract with the MPCA. Data collection was completed in December and is documented in individual reports from the contractors. During January and February 2014, MPCA staff will integrate the reports, analyze the data as a whole, and review existing monitoring data, other relevant scientific studies and information, and the original basis for the sulfate standard to determine whether a change to the standards is warranted. The MPCA will release preliminary recommendation about the wild rice sulfate standard by the end of February.

For more information and to see the reports visit [Minnesota's sulfate standard to protect wild rice webpage](#).

Create your own garden: Annie's how-to guide for five kinds of children's gardens

Creating "gardens of goodness" doesn't take much, just a seed in warm, moist soil (nature does most of the hard work!). Annie's worked with the Center of Ecoliteracy to develop the Creating Gardens of Goodness guide to help teachers and parents plan and create sustainable gardens with their students and children -- in any space or budget. We offer five examples of different gardens -- from simple to complex -- that can flourish at schools and other learning environments. It is our hope that at least one of these examples will fuel your motivation to garden with kids.

To check out these examples visit [SEEK's webpage](#).

Grassroot allies work together to keep grass on the land

Protecting grassland and wetland habitat is one of the most critical environmental challenges facing Minnesota. In response, local teams have formed to consider common sense solutions to keep grass on the land, according to MN DNR. These 10 new teams - working closely across western Minnesota with farmers, landowners, local

officials, and citizens - will promote grassland conservation and grass-based agriculture as outlined in the state's prairie conservation plan. The prairie conservation plan demonstrates unprecedented cooperation between federal agencies, state agencies and conservation organizations. The plan addresses the millions of acres of grassland and wetland which have been lost in Minnesota over the past 150 years and creates a vision of connected grassland and wetland habitat from Canada to Iowa.

For more information on the plan visit the [prairie conservation plan website](#).

MPCA solicits comments on report for Upper Minnehaha Creek Watershed

The MPCA is seeking feedback on draft water quality improvement report for 20 lakes and one creek within the Upper Creek watershed. The water bodies in this project and the land area that drains to them are located in Hennepin and Carver counties. These water bodies include four bays of the Lake Minnetonka system and other lakes and streams north and west of Lake Minnetonka. The 20 lakes discussed in this study are considered impaired because they contain excess levels of phosphorus. According to the report, phosphorus levels in these lakes must be reduced by up to 78%, depending on the lake, to meet state standards. The MPCA report, known as a Total Maximum Daily Load (TMDL), is part of a nationwide effort to clean up pollution in lakes and streams. Every two years, the MPCA compiles a list of lakes and streams that are impaired and do not meet water quality standards. After reviewing comments from the public and obtaining approval from the US EPA, the MPCA and other local organizations will work out a specific plan for improving water quality in the Upper Minnehaha Creek watershed. The draft report may be viewed on the MPCA's [TMDL project webpage](#). For more information or to submit comments, contact [Chris Zadak](#) or call (651) 757-2837.

New wetland map data available

The DNR has released updated wetland map data for 13 counties in east-central Minnesota, encompassing the Twin Cities metropolitan area. The wetlands were originally mapped by the US FWS in the late 1970s and early 1980s as part of the National Wetlands Inventory (NWI). Although still widely used for land use planning, wetland permit screening and natural resource management, the original maps have grown increasingly out-of-date due to landscape alterations over the years. The newly-released map data is the first time the NWI has been updated in Minnesota. The data are available through an interactive mapping application on the [DNR's website](#). The data can also be downloaded, free of charge, for use in geographic information system applications through the [DNR's data deli](#). Besides showing the location, size and type of each wetland, the updated data includes information on the wetland's landscape position and hydrologic characteristics, which can be useful in assessing the benefits provided, such as water quality improvement, flood storage, and fish and wildlife habitat. The release of the wetland map data for east-central Minnesota marks completion of the first phase of a statewide update of the NWI. The DNR is planning to complete the entire state by 2020.

ARTICLES

[More snowy owls visiting Minn. this winter](#) (with audio)

Steven John, Dec. 30, MPR News

Minnesota is getting a few extra visitors from Canada this year: We're in the middle of an irruption of snow owls. The unusual flux of the owls are being spotted across the northern US. They normally live in on Canadian tundras – even in winter.

[Home electricity use in US falling to 2001 levels](#)

Jonathan Fahey, Dec. 30, Associated Press

NEW YORK (AP) – The average amount of electricity consumed in the US home has fallen to levels last seen more than a decade ago, back when the smartest device in people's pockets was a Palm pilot and anyone talking about a table was probably an archaeologist or a preacher.

[To Minnesota: A warning from Kazakhstan](#)

Rebecca Jeong, Dec. 31, Minnesota 2020

The Aral Sea is not coming back; it is forever lost. Individuals who have witnessed its destructions will

[Archeologists race against time in warming](#)

[Arctic Coasts](#) (with audio)

Elizabeth Shogren, Jan. 1, MPR News

Archeologists who study the people who lived in

tell you without a moment's hesitation to value your waters whether you have on or 11,842 lakes. Minnesota is facing a similar challenge with the shrinking size of Lake Pepin, which has been the largest lake on the Mississippi River ever since the first settlement in the 1830s.

How mass produced meat turned phosphorus into pollution (with audio)

Dan Charles, Jan. 2, NPR News

It's a quandary of food production: The same drive for efficiency that lowers the cost of eating also can damage our soil and water.

the Arctic thousands of years ago are in a race against time. Coastal settlements are being washed away by erosion, storm surges and other climate changes related to global warming.

Extreme cold may wipe out high percentage emerald ash borer larvae

Paul Huttner, Jan. 3, MPR News

Here's one resident who may welcome the extreme cold wave headed for Minnesota. Your local ash tree. The extreme temperatures moving in with Sunday's arctic blast may kill off a significant percentage of emerald ash borer larvae, according to one of the premier forest experts in Minnesota.

Government might deregulate corn, soybean seeds

Jan. 4, MPR News

The federal government on Friday proposed eliminating restrictions on the use of corn and soybean seeds that are genetically engineered to resist a common weed killer, a move welcomed by many farmers but feared by scientists and environmentalists who worry it could invite growers to use more chemicals.

Solution sought for pea green water of Grey Cloud Slough

Libor Jany, Jan. 4, Star Tribune

Environmental officials are banking on the construction of a bridge or culvert at Grey Cloud Slough to restore its ecological balance. The South Washington Watershed District is moving ahead with plans to build a bridge or culvert to replace the earthen dam under County Road 75, which has long served as the only road to the north end of the township, officials said.

State's newest renewable energy plant converts manure, veggie waste (with audio)

Mark Steil, Jan. 5, MPR News

On the far side of the state's newest renewable power plant lies the heart of a nearly \$45 million operation designed to produce an abundant supply of energy. Past a maze of storage tanks, ductwork, and pipes in the new plant are two huge digester tanks, each of which holds about 1.6 million gallons of vegetable waste and cow manure.

States confirm water pollution from oil and gas drilling

Kevin Begos, Jan. 5, Star Tribune

Research found well contamination from oil or gas in four states, contradicting industry assertions.

Fates of wild rice, mining intertwined in northern Minn. (with audio)

Dan Kraker, Jan. 5, MPR News

Wild rice, the iconic grain that grows across much of the northern half of the state, is at the center of a contentious debate over mining and the environment.

Beneath the surface: Minnesota's pending groundwater challenge

Jan. 8, MPR News

Even in the land of 10,000 lakes, water is no longer unlimited. Lakes shrink, groundwater drops, wells go dry or get contaminated. Some cities have to look for good municipal water or pay more to treat it.

EVENTS

Jan. 6 - Jan. 12

Northern Green Expo

Wednesday, January 8 - Friday, January 10, 2014

Location: Minneapolis Convention Center, Minneapolis

Brief Description: The expo takes on social challenges related to pollution, natural resources and climatic changes need to be handled before it becomes too late. The expo has been dedicated to provide the future generation a greener planet and life. The innovation done in technologies promises to bring forth a healthier world for the future generation. The search for locating solution to environmental problems can be found here.

For more information on the programs offered, featured speakers, and the trade show visit [Northern Green Expo website](#).

Minnesota Organic Conference

Friday, January 10 - Saturday, January 11, 2014

Location: River's Edge Convention Center, St. Cloud, MN

Brief Description: The Minnesota Organic Conference offers learning and networking opportunities for people new to organic production as well as for those who are old hands at it. Farmers, researchers, educators, technical assistant providers, and business owners will have plenty of time to talk and learn together. The educational program is complemented by an 80-vendor trade show.

Friday Agenda:

8 a.m. Registration
9 a.m. Presentations
10 a.m. Trade Show
10:45 a.m. Conference Welcome and Keynote Address (Charlie Johnson, Johnson Farms)
11:45 a.m. Lunch and Trade Show
1:15 p.m. Presentations
2:45 p.m. Trade Show
3:30 p.m. Presentations
5 p.m. Reception and evening social sponsored by Minnesota Farmers Union

Saturday Agenda:

7:30 a.m. Registration
8 a.m. Presentations
9 a.m. Trade Show
9:45 a.m. Presentations
10:45 a.m. Trade Show
11:15 a.m. Keynote Address (Miles McEvoy, National Organic Program)
12:15 p.m. Lunch and Trade Show
1:45 p.m. Presentations
2:45 p.m. End of Conference

We strongly recommend that you register by mail. However, we also accept walk-in registration at the door. Meals are included in the registration fee, but guaranteed only if you register before Tuesday, December 31, 2013. For more information and how to register visit the [events brochure](#).

Nature's Nook

Friday, January 10 - Saturday, January 11, 2014 @ 8:30 - 11:30 a.m.

Location: Elk's Nature Center in Rasmussen Woods, Mankato

Brief Description: Nature's Nook is an environmentally-based monthly program for pre-K through middle school children and their families. Together and through the beauty of Mankato's own Rasmussen Woods, we will promote literacy through stories and activities that explore our natural world. Sessions include story time, activities, games and a short lesson through the monthly topic.

For more information call MSU Mankato Community Engagement (507) 389-5789.

Snowshoe Hike

Saturday, January 11, 2014 @ 10 a.m.

Location: Fort Ridgely State Park, Fairfax, MN

Brief Description: Come out to Fort Ridgely State Park for a Snowshoe Hike at 10 a.m. Join Scott Kudelka, the Minneopa Area Naturalist, to learn about snowshoeing

and some practical advice on using snowshoes. We will take an hour and half hike on the park's trails talking about the history of snowshoeing, unique characteristics of Fort Ridgely and animal life in the winter. Please meet at the park's chalet (golf clubhouse). Snowshoeing is probably the most accessible and easiest winter sport. People have been using some form of snowshoes or skis to move across snow-covered landscape for at least 6,000 years. Note that this event may be changed or cancelled due to weather.

For more information call (507) 384-8890 or visit the [Fort Ridgely State Park page](#).

Snowshoe Hike

Saturday, January 11, 2014 @ 1 p.m.

Location: Flandrau State Park, New Ulm, MN

Brief Description: Come out to Flandrau State Park for a Snowshoe Hike at 1 p.m. Join Scott Kudelka, the Minneopa Area Naturalist, to learn about snowshoeing and some practical advice on using snowshoes. We will take an hour and half hike on the park's trails talking about the history of snowshoeing, unique characteristics of Flandrau and animal life in the winter. Please meet at the park's beach house. Snowshoes can be rented at the park office. Please contact them directly at (507) 233-9800. Snowshoeing is probably the most accessible and easiest winter sport. People have been using some form of snowshoes or skis to move across snow-covered landscape for at least 6,000 years. Note that this event may be changed or cancelled due to weather.

For more information call (507) 384-8890.

National Winter Trails Day

Saturday, January 11, 2014 @ 11 a.m. - 4 p.m.

Location: Fort Snelling State Park, Picnic Shelter A

Brief Description: An opportunity to discover the fun of winter by trying snowshoeing, cross-country skiing, ice fishing and more. This is a family-oriented event is especially for anyone new to snow sports, with all ages and ability levels welcome. Outdoor experts from the DNR and, outdoor retailer REI, and other local outdoor organizations will conduct demonstrations and lead activities throughout the day. Participants can take a naturalist-guided hike, try their hands at ice sculpting, and learn about skijoring, winter camping and how to build a quinzee (snow shelter). Students from Edison High School will camp out in the quinzees on Saturday night. Equipment for all activities will be provided, but participants can also bring their own. Free hot cocoa will be provided to enjoy around a bonfire. There is no charge to participate in any of the activities, but a vehicle permit (\$5/day or \$25/year) is required to enter the park.

For more information visit the [online events calendar](#) or call the park at (651) 725-2724.

Jan. 13 - Jan. 19

Workshop: Native Plants, Raingardens and Lawn Care for Water Quality

Monday, January 13, 2014 @ 6-8 p.m.

Location: Mississippi Market, 7th Street, St. Paul, MN

Brief Description: Whether you're interested in a smaller native planting or want to transform your whole yard into a force for clean water in 2014, this FMR workshop can help you jumpstart your spring planning. We'll also touch on ways to make your yard river-friendly this winter: We will discuss:

- Ways to provide sidewalk traction in winter, possibly eliminating or reducing salt runoff
- What needs to be picked up from yards in winter to reduce pollution
- Landscaping with native plant species
- The proper use of lawn fertilizer
- Backyard composting
- Soil testing
- Creating a rain garden
- Additional innovative approaches to managing stormwater

This is a free workshop. We invite you and your friends to join us in learning how to make your impact on the watershed a positive one! Register and learn more by visiting the [FMR event page](#).

GrassWorks Grazing Conference
Thursday, January 16 - Saturday, January 18, 2014

Location: The Patriot Center, Wasau, WI

Brief Description: The 22nd Annual GrassWorks Grazing Conference will host a large number of diverse participants, including livestock and field farmers, "buy local" customers, technology and service providers, representatives of government at all levels, researchers and financial institutions. Many of our speakers are working farmers. For the past 22 years, GrassWorks has been a hub of grazing education in the state, coordinating the annual Grazing Conference, serving as a clearinghouse for local grazing networks and publishing resource materials on managed grazing. The organization continues to advance grazing through innovative new projects.

For more information and to register visit [The 22nd Annual GrassWorks Grazing Conference event](#) page.

Upper Midwest Regional Fruit & Vegetable Growers Conference and Trade Show
Friday, January 17 - Saturday, January 18, 2014

Location: St. Cloud River's Edge Convention Center, St. Cloud, MN

Brief Description: The 2013 Upper Midwest Regional Fruit & Vegetable Growers Conference is sponsored by the Minnesota Fruit & Vegetable Growers Association in cooperation with the University of Minnesota Extension, MDA, and USDA-Risk Management Agency. Sessions include vegetable production, small fruit production, marketing, risk management and much more. The trade show features the latest in equipment, seed, tools and more.

For more information and to register visit the [Upper Midwest Regional Fruit & Vegetable Growers Conference and Trade Show event page](#)

Citizen's Frac Sand Summit
Saturday, January 18, 2014 @ 9 a.m. - 4:30 p.m.

Location: Tau Center, Winona

Brief Description: At this summit Minnesotans and nature enthusiasts will build their power to keep frac sand mining out of this region and create vibrant, sustainable communities. Topics and workshops include:

- Frac sand mining's impact on farmland
- Frac sand mining's role in extreme energy extraction
- Ensuring that state regulations put public health and well-being before corporate profits
- Understanding the threat to human health from exposure to silica dust
- Using township rights to control frac sand mining
- and more!

Featured speakers include: John Linc Stine, Commissioner of the MPCA; Jennifer Krill, executive director of EarthWorks; Michael McCawley of the School of Public Health Program at the University of Wisconsin Eau Claire. Cost is \$10 and includes lunch of local foods.

For more information and to register visit [LSP Citizen's Frac Sand Summit event page](#).

Wild about Wildlife
Saturday, January 18, 2014 @ 1-2:20 p.m.

Location: Elk's Nature Center at Rasmussen Woods, Mankato

Brief Description: Join the Minneopa Area Naturalist Scott Kudelka for an interpretative program on Minnesota wildlife. What is the one candid who climbs trees? Who can swim underwater for 100 feet without taking a breath? How does a river otter stay warm in the winter? These questions and many more will be answered in the Wild about Wildlife program. Each mammal has adapted to survive in their natural environment and we will look at some of the more interesting characteristics of 14 different mammals including the badger, coyote, and skunk. We will use the furs of the 14 different mammals to show how each one is unique in their own way. There will be a number of hands-on activities

including "Guess the Critter."

For more information email [Scott Kudelka](mailto:Scott.Kudelka@mn.gov) or call (507) 384-8890

Candlelight Ski, Snowshoe and Walk
Saturday, January 18, 2014 @ 5-8 p.m.

Location: Minneopa State Park, Mankato, MN

Brief Description: Gather with friends, neighbors, and others to enjoy the natural wonders and beauty of the winter season at the Minneopa Group Campground. Come out to enjoy an ice candle lit trail groomed for both cross-country skis and snowshoes cutting through a floodplain forest. A blazing bonfire along with hot cocoa and cookies will be part of this festive event. The event will take place even if there is no snow on the ground. Co-sponsored by the Friends of Minneopa, this nonprofit, volunteer organization of citizens strive to preserve, manage and promote the resources of this state park.

For more information on the event email [Scott Kudelka](mailto:Scott.Kudelka@mn.gov) or call (507) 384-8890.

Jan. 20 - Jan. 26

Raptors in Minnesota, the Minnesota Raptor Center
Saturday, January 25, 2014 @ 5:30-7:30 p.m.

Location: Springbrook Nature Center, Fridley, MN

Brief Description: Experience the amazing raptors of Minnesota firsthand as the Minnesota Raptor Center shares four of their raptors, including a bald eagle. Expert birders and backyard bird watchers alike will delight in seeing these majestic birds and learning about their natural history. Starting this January, Springbrook will begin a series of programs featuring a lively and educational presentation followed by a casual catered meal. The presentations are geared towards an adult audience interest in nature, environmental issues, conservation and outdoor heritage. The evening presentations will be followed by a meal where attendees can gather with friends, family and others that share their passion for the outdoors.

For more information and to pre-register call the nature center at (763) 572-3588.

Snowshoe Hike

Saturday, January 25, 2014 @ 10 a.m.

Location: Flandrau State Park, New Ulm, MN

Brief Description: Come out to Flandrau State Park for a Snowshoe Hike at 10 a.m. Join Scott Kudelka, the Minneopa Area Naturalist, to learn about snowshoeing and some practical advice on using snowshoes. We will take an hour and half hike on the park's trails talking about the history of snowshoeing, unique characteristics of Flandrau and animal life in the winter. Please meet at the park's beach house. Snowshoes can be rented at the park office. Please contact them directly at (507) 233-9800. Snowshoeing is probably the most accessible and easiest winter sport. People have been using some form of snowshoes or skis to move across snow-covered landscape for at least 6,000 years. Note that this event may be changed or cancelled due to weather. There is no charge attend this event, but vehicles are required to have a permit (\$5/day or \$25/year) that can be purchased at the park.

For more information call (507) 384-8890.

Jan. 27 - Feb. 2

Fracking: What we know and don't know about its impact on water
Friday, January 30, 2014 @ 7-9 p.m.

Location: Student Center, University of MN, St. Paul Campus

Brief Description: The speaker at this presentation is Robert Jackson, a Duke University environmental scientist who led some of the first peer-reviewed research on the hydraulic fracturing for oil and gas and its impact on groundwater. This is sponsored by the Freshwater Society and the University of Minnesota College of Biological Sciences, and it is a FREE and open public lecture. All are invited to come and join the discussion surrounding fracking.

For more information and to register visit [Freshwater Society](http://FreshwaterSociety.org).

Feb. 3 - Feb. 9

Water Policy and Management
Wednesday, February 5, 2014 @ 6:30-8 p.m.

Location: Wildwood Branch-Washington County Library, Mahtomedi, MN
Brief Description: The trends of consistently lowering lake levels and drawing from river water to aid drought-burdened areas force us Minnesotans to face the troubling issue of where Minnesota's beloved, iconic resource is going and how to maintain it better. Join Izaak Walton League members and concerned residents for a relevant discussion on recently passed water policy legislation, and upcoming water management legislation changes. At this discussion you can learn much about water management and weigh in with your thoughts. This is a free and open event. There will be light refreshments provided.

For more information on the email [John Siekmeier](mailto:John.Siekmeier@mn.gov).

Running on Empty? Managing Minnesota's Water
Wednesday, February 5, 2014 @ 6:30-8 p.m.

Location: Wildwood Branch-Washington County Library, Mahtomedi, MN
Brief Description: The trends of consistently lowering lake levels and drawing from river water to aid drought-burdened areas force us Minnesotans to face the troubling issue of where Minnesota's beloved, iconic resource is going and how to maintain it better. Join Izaak Walton League members and concerned residents for a relevant discussion on recently passed water policy legislation, and upcoming water management legislation changes. At this discussion you can learn much about water management and weigh in with your thoughts. This is a free and open event. There will be light refreshments.

For more information contact [John Siekmeier](mailto:John.Siekmeier@mn.gov).

13th Annual Road Salt Symposium
Thursday, February 6, 2014

Location: University of MN Landscape Arboretum, Chaska, MN
Brief Description: The 13th Annual Road Salt Symposium will feature information about the current state of chloride in MN waters. Learn about innovative tools and new methods to maintain safe roads while repairing out waters and sustaining our resources. If your transportation department is looking for solutions, your waterways are threatened by chloride, you want to educate your citizens, or you are looking to do your part to protect our waters- you won't want to miss this symposium!

Agenda highlights include:

- Keynote features success stories from a few "teachable moments" from local transportation departments
- Virginia's initiative to recycle salt runoff
- New Hampshire's new liability legislation for certified salt applicators and property owners
- Update on the current state of chloride in Metro area waters
- Super-sized winter maintenance equipment
- New findings on chloride in our groundwater
- 2014 Environmental Leadership Award
- Attendees earn Roach Scholar Credits

Please register by Feb. 1, 2014. Cost for the day is \$125 (\$85 seniors and students) which includes a continental breakfast and buffet lunch. Entrance into the Arboretum is complimentary.

For more information and to register visit the [Annual Road Salt Symposium](http://www.mn.gov/roadsalt) webpage

Historic Building Snowshoe Hike
Saturday, February 8, 2014 @ 10 a.m. and 1 p.m.

Location: Flandrau State Park, New Ulm, MN
Brief Description: Come out to Flandrau State Park for two snowshoe hikes on Feb. 8 at 10 a.m. and 1 p.m. Join Scott Kudelka, Minneopa Area Naturalist to learn about snowshoeing and some of the historical features found at Flandrau. At 10 a.m. there will be an hour and half hike on the park's trails to talk about the

history of snowshoeing, unique characteristics of Flandrau and animal life in winter. At 1 p.m. we will take a snowshoe hike to look at some of the historical features built by the Civilian Conservation Corps and Works Progress Administration in the 1930's during the Great Depression. These two groups are responsible for some of the beautiful and unique buildings found at Flandrau State Park including the Beach House and Caretaker's Residence. Please meet at the park's Beach House. Snowshoes can be rented at the park office. Please contact them directly at (507) 233-8900. There is no charge to attend this event, but vehicles are required to have a permit (\$5/day or \$25/year) which can be purchased at the park.

For more information contact [Scott Kudelka](#)(507) 384-8890

Feb. 10 - Feb. 16

Our water in a Changing World -- Climate Change and the Urban Watershed
Wednesday, February 13, 2014 @ 7-8:30 p.m.

Location: Science Museum of Minnesota, St. Paul

Brief Description: Please join FMR and the Science Museum as Patrick Hamilton, Director of the Global Change Initiatives Program at the Science Museum of Minnesota, and Sarah Hobbie, professor of Ecology, Evolution and Biology at the U of M, discuss the intersection of climate change and local water quality issues. Mr. Hamilton and Prof. Hobbie will present you with a wealth of fascinating information, spanning topics from changes in growing seasons and urban heat islands, to new stormwater management issues and tree species suitable for the future. This event is free, but registration is required.

For more information and a link for registration visit the [Friends of the Mississippi River website](#).

Feb. 17 - Feb. 23

Conservation Tillage Conference
Tuesday, February 18 - Wednesday, February 19, 2014

Location: Holiday Inn and Suites, St. Cloud, MN

Brief Description: Conservation tillage is the focus of the ninth annual University of Minnesota Extension Conservation Tillage Conference and trade show. This conference emphasizes proven farm experience and applied science. Straight from the trenches, learn how heavier, colder soils aren't necessarily the challenge they're made out to be. And, what have long-time no-tillers and reduced-tillage farmers learned that could spare you the same lessons? Conference highlights include: weed species shifts and control; nutrient management in high-residue systems; strip till strategies straight from veteran farmer practitioners; subsurface drainage options; proven crop strategies for your system to anchor nutrients, manage soil moisture extremes and provide free nitrogen; soil health improvements with reduced till systems; climate trends and soil resiliency; vendor sessions: learn about new equipment, products and technology.

For more information on featured speakers, program agenda and the trade show visit the [9th Annual Conservation Tillage Conference website](#) or email [Jodi DeJong-Hughes](#) or call (320) 815-4112

An Evening with Teddy Roosevelt, America's Conservationist President
Saturday, February 22, 2014 @ 5:30-7:30 p.m.

Location: Springbrook Nature Center, Fridley, MN

Brief Description: Explore America's outdoor heritage with Adam Lindquist's portrayal of Teddy Roosevelt as he brings to life the origins of the conservation movement in America. During his presidency, Roosevelt created the US Forest Service, established 51 federal bird reservations, 150 national forests, and 5 national forests, protecting nearly 230 million acres of land. Discover the amazing story of how our 26th president came to be known as the "conservationist president," leaving a legacy of environmental protection that remains to this day. Springbrook will begin a series of programs featuring a lively and educational presentation followed by a casual catered meal. The presentations are geared towards an adult audience interest in nature, environmental issues, conservation and outdoor heritage. The evening presentations will be followed by a meal where attendees can gather with friends, family and others that share their passion for the outdoors.

For more information and to pre-register call the nature center at (763) 572-3588.

Five Senses Hike

Sunday, February 22, 2014 @ 7-8 p.m.

Location: Minneopa State Park

Brief Description: Go stomping through the snow at Minneopa State Park on a Five Senses Snowshoe Hike. We will go for a hike through the woods and along the Minneopa Creek Valley down to the confluence with the Minnesota River using no artificial light source. On the route we will stop a number of times to talk about how we use our five different senses (hearing, taste, sight, touch and smell). We will be out for about an hour and please dress appropriately. Night present a whole new world to most of us. Very few of us spend extended periods of time in the dark and some people may even become fearful to the night. As humans we are constantly trying to reduce the fun of being outside after dark. Please meet at the group campground area on the campground site of Minneopa State Park. Snow shoes can be rented at the park by calling (507) 389-5464 or stopping at the office.

For more information email [Scott Kudelka](mailto:Scott.Kudelka@mn.gov) or call (507) 384-8890

Managing the Uncertainty of Specialty Crops

Sunday, February 23, 2014 @ 9 a.m. - 3:30 p.m.

Location: South Central College, North Mankato, MN

Brief Description: As with other businesses, fruit and vegetable growers must deal with changing consumer demands and expectations, but fruit and vegetable producers must also work around unpredictable weather conditions, changing insect pests and increased disease pressure. In this workshop led by Thaddeus McCamant, Specialty Crops Instructor with Central Lakes College, growers will learn key decision making components to start or expand their business. Topics included in this day long workshop are:

- Marketing issues: recent changes in consumer demand for direct market fruit and vegetables
- A work calendar for the growing season: Paying attention to every step when growing your crop in order to reach your financial goal
- Investment in equipment: What is the return on investment for different types of equipment?
- How to avoid burnout: Tales from the field

*Registered farms will received college credit for this workshop

For information and to register visit the [Managing Uncertainty of Specialty Crops events page](#). Other dates are available Feb. 9, 2014 in Brainerd, MN and Feb. 16 in Anoka, MN.

JOB ANNOUNCEMENTS

DISTRICT TECHNICIAN	
Department:	Minnehaha Creek Watershed District
Closing Date:	January 2014
Location(s):	Minnetonka, MN
Who May Apply:	All qualified job seekers
Responsibilities:	This position shares responsibilities with the District's Operation & Maintenance Programs and the District's Regulatory Program. While the following list shows major job responsibilities, it is not intended to be an inclusive list of all the activities that may be required of this

position.

1. Inspect District facilities and capital projects to identify maintenance needs and perform small scale natural resource restoration and maintenance tasks.
2. Assist with project and contract management functions associated with larger scale maintenance related to District projects, District facilities, and public ditches.
3. Perform field inspections to assure compliance with District regulations, land covenants and easements.
4. Prepare activity reports, coordinate and attend meetings with required Local Government Units.
5. Assist in the processing and enforcement of District regulations.
6. Maintain and update Operations & Maintenance and Permit databases.
7. Other duties as assigned.

For more information and how to apply visit the [job announcement](#) webpage

NATURAL RESOURCE SPECIALIST

Department:	Ramsey Conservation District
Closing Date:	January 10, 2014
Location(s):	Arden Hills, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position provides professional administration for Department of Natural Resources (DNR) Boat & Water Safety and Recreation programs, including public outreach and assisting with Surface Use/restriction permit applications. For all programs/assigned projects, gather, analyze information, monitor expenditures, ensure compliance, prepare and submit reports and keep records. Research and analyze existing work methods, systems and procedures. Revise procedures and forms to enhance program and cost effectiveness.</p> <p><u>Major responsibilities include:</u></p> <p>*Water Surface Use/Restrictions program and Marine Event requests: Manage the application/review process to guide applicants to compliance with applicable policies, statutes and laws. Prepare joint powers agreements. Develop/prepare the recommendations for Enforcement Director to approve or deny. Track, notify parties, manage files and distribute results. Assist in proposing and drafting language for new or modified statutes, rules and policies. Respond to inquiries.</p> <p>*Budget related duties: Gather, analyze and monitor program expenditures for the Safety & Education Program and Water Recreation Program. Prepare and report regularly on all accounts. Track/monitor open encumbrances, direct cancellation when complete and ensure fit to budget. Find unusual, ineligible or improperly coded expenditures and correct. Ensure compliance with state financial policies and US Coast Guard or US Fish & Wildlife Service grant eligibility requirements. Inform DNR staff of needed funding and project codes.</p> <p>*Administer the Boat & Water Safety Program: Answer technical questions from the public. Interpret laws and rules. Apply for training courses, coordinate locations and registrations. Manage publication inventory and oversee distribution. Proofread new/revised publications. Maintain database of safety publications, materials and</p>

customers. Assist with displays/staffing at boat shows, etc. Review, summarize and file enforcement activity logs and report to the Boat and Water Safety Manager. Run queries and reports from AS400 database. Summarize/analyze survey data; report trends and recommend actions. Manage program records/files-transform to electronic records. Ensure calibration, send Sound Level Meters & Portable Breath Testers, verify returns. Assist in completing US Coast Guard reports. Coordinate awards program.

*Administer the Water Recreation Program (Public Water Accesses, Water Trails and Fishing Pier programs). Answer technical questions from public. Interpret laws/rules. Determine needed updates to Public Water Access website and maps; coordinate implementation. Coordinate Water Recreation supply and equipment orders, determine priorities and deliveries. Summarize/analyze boater survey data. Look for/report trends & needed actions. Manage program records and files; transform to electronic files. *Special Projects as assigned.

For more information and how to apply visit the [job announcement](#) webpage

NR FORESTRY REGIONAL SPEC, INSECT AND DISEASE	
Department:	Forestry/Central Office, Minnesota Department of Natural Resources
Closing Date:	January 13, 2014
Location(s):	St. Paul, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position exists to manage the Forest Health Programs and the Urban and Community Forestry Programs in the Central Region.</p> <p>Responsibilities include:</p> <p>Collaborate with the State Forest Health Implementation Team to design, develop, and implement a comprehensive Minnesota Forest Health Program which offers training, materials, and assistance to Department of Natural Resources staff. Provide administrative and technical oversight of the Region Forest Health Program; develop and manage the Urban and Community Forestry Program; and design, coordinate and implement forest health surveys and assessments.</p> <p>Develop, analyze and interpret forest health information and management strategies to ensure management and the public is informed through public presentations, radio, television, news articles and scientific publications. Develop and deliver educational/informational resources and publications to various audiences to integrate and implement ecosystem-based pest management practices and educate selective and proper use of pesticides. Coordinate training activities with other divisions and agencies.</p> <p>Operational Support: Monitor the work of Forestry Area Staff. Develop and deliver educational programs/materials. Train natural resource staff in the administration and implementation of forestry programs.</p> <p>Formal Training: Complete formal Division of Forestry classroom and field training sessions as assigned.</p> <p>Frequent travel is required to implement the Forest Health Program across the entire</p>

Central Region, and at times statewide.

For more information and how to apply visit www.career.state.mn.us Posting # 13DNR000865

ASSISTANT AREA WL MANAGER

Department:	Fish and Wildlife/Region 1, Minnesota Department of Natural Resources
Closing Date:	January 13, 2014
Location(s):	Fergus Falls, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position exists to assist the Area Wildlife Manager in planning, developing, and implementing DNR wildlife management programs, activities and policies by managing, preserving, and conserving wildlife habitat and populations on public and private lands in the area.</p> <p>Core Activities:</p> <ul style="list-style-type: none">• Provide assistance in the implementation of wildlife habitat management programs and policies on public private lands so that maximum benefits for wildlife and the management of wildlife populations and habitat, and the public.• Aid in the implementation of wildlife population management programs and policies as well as environmental protection programs so that wildlife and habitat are not adversely affected.• Assist in the development and implementation an information and education program that the public will be better informed about wildlife issues, current DNR conservation efforts, and the management of wildlife populations and habitat.• Contribute to planning and development of policies so that wildlife habitat and wildlife populations are given consideration and protection.• Train, direct, evaluate, review, and effectively recommend rewards and discipline for subordinate personnel assigned to the Area Wildlife Office so that wildlife management activities can be efficiently implemented.• Assist in the administration wildlife management programs of the Area Wildlife Office so that resource management is smoothly and efficiently implemented according to plans, policies, and legal mandates. <p>For more information and how to apply visit www.career.state.mn.us Posting # 13DNR000879</p>

OUTREACH COORDINATOR

Department:	MDA
Closing Date:	January 14, 2014
Location(s):	St. Paul, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position will coordinate, plan, develop, and implement Pesticide and Fertilizer Management Division's (PFMD's) public information efforts, annual reporting, and short and long term outreach programs. Programs will encompass all regulatory and some non-regulatory activities.</p>

This position will also be responsible for the MDA's Agricultural Fertilizer Research and Education Council (AFREC) homepage. In collaboration with MDA communication staff this position will provide training and support to PFMD staff. This position will also create concise and effective performance indicators which characterize PFMD regulatory and non-regulatory activities. Finally, this position will ensure effective delivery of public information regarding agricultural chemical emergencies impacting Minnesota.

For more information and how to apply visit [job announcement](#) webpage.

DISTRICT TECHNICIAN

Department:	East Otter Tail Soil and Water Conservation District
Closing Date:	January 17, 2014
Location(s):	Perham, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>Duties and Responsibilities:</p> <ul style="list-style-type: none"> ● Assist with the planning and implementing ofshoreland best management practices in Otter Tail County. ● Provides clients information of programs available to assist with natural resource protection (i.e. USDA-Environmental Quality Incentive Program, BWSR - State Cost Share Program, CRP Buffer Initiative, RIM, WRP, and other programs). ● Assists with preparing educational materials, demonstrations, workshops, tours, newsletter articles, press releases in cooperation with University of Minnesota Extension Service, NRCS, Otter Tail County Land and Resource Management Department, and other agencies. ● Delivers educational presentations to schools, units of government, and public service groups. ● Administers and implement all aspects of the County Ag Inspector Program ● Pursues and prepares natural resource protection grants in coordination with the District Manager. ● Assists with grant management tracking and reporting in coordination with the District Manager. ● Provides technical assistance to landowners regarding the County Shoreland Ordinance requirements. ● Fully understands the Federal, State and local laws and statutes in relation to wetland conservation, and assists with the technical aspects of the Wetland Conservation Act and USDA wetland protection provisions. ● Is able to supervise district field staff when given project responsibility. ● Works with units of government and private industry for planning purposes in land use and water quality. ● Assists with surface water quality monitoring and GIS targeting efforts of the EOT SWCD ● Represent the East Otter Tail SWCD and Otter Tail County at various watershed organizations and cooperative efforts ● Other duties as assigned. <p>For more information and how to apply visit the job announcement webpage</p>

AGRIC ADVISOR, AGRICULTURAL CHEMICALS

Department:	Minnesota Department of Agriculture
Closing Date:	January 21, 2014
Location(s):	St. Paul, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position exists to provide project management to and the cleanup of sites contaminated with agricultural chemicals using the authorities established under state and federal laws. Contaminated sites must be investigated and cleaned up to prevent adverse effects on public health, welfare and the environment.</p> <p>For more information and how to apply visit www.career.state.mn.us Posting # 13AGR000126</p>

AGRIC UNIT ADVISOR

Department:	Minnesota Department of Agriculture
Closing Date:	February 4, 2014
Location(s):	St. Paul, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position is located in St. Paul and will provide supervision and technical direction for the Fertilizer Technical Unit. Supervision covers the nonpoint nutrient, manure and fertilizer management programs, including research, demonstration and evaluation programs. The position has an emphasis on communications, public speaking, representing programs at legislative hearings, policy development and regulatory implementation. This position will oversee many of the evaluation and assessment aspects of the Nitrogen Fertilizer Management Plan in partnership/coordination with the promotion and implementation phases conducted by the unit.</p> <p>For more information and how to apply visit www.career.state.mn.us Posting # 13AGR000134</p>

WATER QUALITY COORDINATOR

Department:	Minnesota Department of Agriculture
Closing Date:	February 4, 2014
Location(s):	St. Paul, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position will be filled as either a Soil Scientist 1 or Soil Scientist 2 based on the qualifications of the selected candidate. If you are interested in and qualify for both positions, please apply to this position and 14AGR000001. This posting may be cancelled if this vacancy is filled at the Soil Scientist 2 level.</p> <p>This position will be responsible for preventing and minimizing degradation of water quality in Minnesota's central sands region through the promotion, evaluation, and as indicated, development of crop nutrient best management practices (BMPs) and Alternative Management Tools (AMTs).</p>

This position will also provide educational opportunities and technical assistance to crop producers, agricultural professionals, and local government officials located in areas with known or potential water contamination from nitrates, such as municipal drinking water source water protection areas, areas of elevated nitrate in private wells, and state groundwater management areas. The scope of the position's work is guided by the Minnesota Nitrogen Fertilizer Management Plan.
A majority of the work focuses on Morrison, Todd and Wadena counties.

For more information and how to apply visit www.career.state.mn.us Posting # 13AGR000002 or #AGR000001

SUMMER INTERN

Department:	Heron Lake Watershed District
Closing Date:	February 17, 2014
Location(s):	Heron Lake, MN
Who May Apply:	All qualified job seekers
Responsibilities:	<p>This position is that of Summer Intern for the Heron Lake Watershed District (HLWD) and the North Heron Lake Game Producers Association (NHLGPA) in the counties of Nobles, Jackson, Murray, and Cottonwood. It provides assistance in all aspects of water quality improvement efforts outlined in grant work plans in a manner consistent with the intent of the HLWD Overall Plan. The individual holding this position is an employee of HLWD.</p> <p>MAJOR DUTIES:</p> <ol style="list-style-type: none"> 1. Monitor water quality at select stream and lake sites. 2. Contact landowners and conduct best management practices site inspections. 3. Perform annual artificial nest inspection and survey. 4. Complete daily journal of activities. 5. Bi-monthly activity report. Provide newsletter articles as needed. 6. Develop detailed report of projects and activities completed, with photographs. Computer and writing skills are necessary. 7. Assist with goose banding in cooperation with Department of Natural Resources staff. 8. Water level readings – Duck Lake, South Heron Lake, and East and West Graham. 9. Organize all digital photos by project type. 10. Assist HLWD staff with rain garden and shoreline project installation. 11. Assist Okabena-Ocheda Watershed District (O-OWD) staff with water quality and flow monitoring within the O-OWD. 12. Assist Natural Resources Conservation Service staff with project design and installation. 13. Attend HLWD and NHLGPA meetings. 14. Present summary of summer activities at August board meeting. 15. Complete evaluations: self, program, and personnel. 16. Answer telephone calls. 17. Work with the public in a polite and courteous manner. 18. Other duties as assigned. <p>For a complete job description and application form, please contact Jan Voit at (507) 793-2462, or visit www.hlwdonline.org</p>

-STEWART UDALL

Please register at the Minnesota River Watershed Alliance's bulletin board at <http://mail.mnsu.edu/mailman/listinfo/mr> receive regular updates on what is happening in the Minnesota River Basin.
