

Rain Gauge Volunteers Needed in Koochiching County

Rain gauge volunteers have been extremely important to the SWCD and to the University of Minnesota for many decades. Here in Koochiching County, there is a data gap that is not filled by any nearby weather radars. Helping to fill the data gap are rain gauge volunteers who take physical rain measurements each day at their homes, record that data on provided forms, and send those forms to the SWCD office. The SWCD then submits this much needed data to the University of Minnesota. Uses for this information are many, including water supply and flood forecasts which is especially important during major weather events, such as the flood of 2014.

We are so grateful to all of our past and present rain gauge volunteers who have invested their time capturing rain fall information in our county. Your continued commitment to this valuable program is very appreciated...we couldn't do it without you!

We are also looking for additional rain gauge observer volunteers in the Big Falls, International Falls, and Mizpah areas.

NO EXPERIENCE NECESSARY!

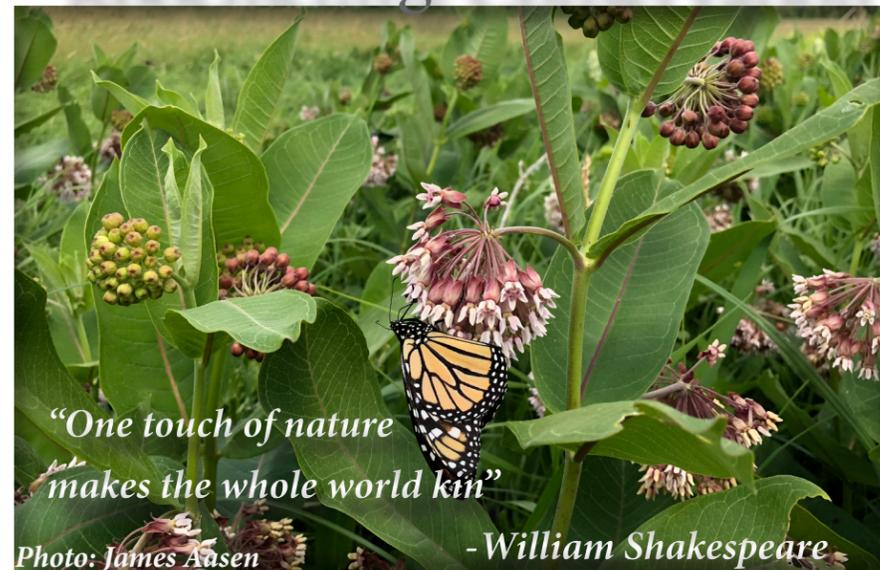
Rain gauge, reporting sheets, and return envelopes will be provided to you by the SWCD.

If you live in Koochiching County and are interested in becoming a rain gauge observer, contact:

Jolèn Simon
Program Coordinator
218-283-1180
jolen.simon@co.koochiching.mn.us



Koochiching Conservation



**Winter/Spring
2019**

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NEW! - Native Plant Sale Brochure inside!



Do you like to plant beautiful flowers and forbs to improve the look of your yard or property? Would you like to help improve pollinator habitat and support native plant species in the process? Then maybe our native plant sale is right for you. New for 2019, the Koochiching SWCD will be offering native plant kits for purchase this spring. Kits come in custom seed packs and immediately plantable plug starters. Each kit comes with a variety of flower, forb, and grass species specially selected for site conditions and your project goals. Whether hoping to attract butterflies, or looking for an aesthetically nice seed mix for your septic field, the Koochiching SWCD Native Plant sale has a kit for you.

How can I help Pollinators and Native species?

If you've been interested in the environment or natural resource conservation within the last decade, there's a good chance you've heard at least a little about bee and butterfly population decline and the spread of non-native invasive species. In the never ending balance between the pressure that we put on the land through human modified land use and preservation of the environment, these issues are toward the top of the priority list for conservation action. The good news is that there are easy ways for the average person to make a difference. Simply by choosing native species as alternatives to non-native invasive ornamental plants that may also be noxious. Go a step farther, and replace already established invasives with native plants. You can do your part to fight for pollinators, and native species without leaving your property. Whether planting a wildlife opening on your hunting property or choosing interesting flowers for your flower beds there are native plant alternatives that will work for you.

Interested in Minnesota's Native Pollinators? Check out this article "A Bounty of Wild Bees" at: <https://www.dnr.state.mn.us/mcvmagazine/issues/2015/jul-aug/minnesota-native-bee-survey.html>

If you think you may have invasive species on your property, the first step is proper identification. The U.S. Department of Agriculture has compiled a helpful list of invasive species sorted by state. This resource can be found at: <https://plants.usda.gov/java/noxiousDriver>

Removing an infestation of invasive plants may seem daunting. Natural resource agencies often offer cost-sharing incentives to help pay for much or most of the cost of invasive control. The Koochiching Soil and Water Conservation District is here to help you find a way to tackle your conservation project: give us a call at 218-283-6742.



Aquatic Invasive Species (AIS) Collaborative Efforts Continue

A county aid tax bill provided \$4.5 million in 2014 and roughly \$10 million a year to follow allowing Minnesota counties to help prevent the spread of Aquatic Invasive Species (AIS). The Department of Natural Resources (DNR) has made it a priority to prevent the spread of AIS from lake to lake as well as manage current AIS problems.

The Association of Minnesota Counties, Minnesota Department of Natural Resources (MNDNR), and MN Sea Grant have been working with local governmental units around the state to implement AIS programs. The funding distribution is calculated by the number of parking spaces and public water accesses.

The Koochiching SWCD has been working with Koochiching County's Environmental Services

Department (ESD) to create education materials, attend local events, and plan for future use of the AIS funding in Koochiching County.

The summer of 2017 was the start of the watercraft inspection program in Koochiching county. The first year consisted of watercraft inspectors manning 5 boat landings on Rainy Lake with a decontamination unit being utilized off site. In 2018, the Watercraft inspection program expanded to include spring fishing season on the Rainy River. This was a collaboration between Koochiching County/SWCD and Lake of the Woods County/SWCD to educate and inspect boaters coming from instate and surrounding states on aquatic invasive species and the threat they pose.

If interested in becoming a watercraft inspector, watch for job announcements coming soon on the Koochiching SWCD website or by contacting Sam Soderman:

For more information on aquatic invasive species or the inspection program visit:

<http://koochichingswcd.org/ais/>
or
Contact Sam Soderman,
Koochiching SWCD Water
Resource Specialist
sam.soderman@co.koochiching.mn.us
218-283-1176.

Envirothon Events

Soil and Water Conservation Districts (SWCDs) around the nation take part in an annual event called the "Envirothon", an outdoor learning event where high school students (grades 9-12) and junior high students (grades 6-8) attend five sessions on environmental issues.

In 2018, Koochiching County sent 2 teams from Northome School to the competition, one junior high team and one senior high team. Led by science teacher Jim Schneider, the Seniors took sixth place and the Juniors took second place in their respective divisions.

We would like to extend our sincere thanks to our local 2018 sponsors for



2018 Northome Teams

their very generous contributions to this event: Rainy Lake Sportfishing Club; Packaging Corporation of America; Coca-Cola Bottling Co.; Northome Grocery; Bremer Bank of International Falls; Ridge Runners Snowmobile Club; Koochiching County Farm Bureau; and Super One Foods. Without local support

of area businesses, this event would not be possible. And...both Bremer and Coca-Cola have now donated 8 years consecutively to date!

The 2019 North Central Envirothon will be held at Bemidji State Park, May 1, 2019.

For more information, contact Jolen Simon at 218-283-1180 or jolen.simon@co.koochiching.mn.us

Rat Root River Progress

In partnership with the Rainy Lake Sportfishing Club and local DNR Fisheries, the Koochiching SWCD will continue working on enhancement projects on the Rat Root River through the end of the grant period, June 2019. Funding for this work is made possible through a grant awarded by the Conservation Partners Legacy (CPL) in 2016 and local match dollars provided by the Rainy Lake Sportfishing Club.



channel water towards the middle of the stream, keeping substrate clean to increase the chances of walleye spawning success. The bridge structure removal project is a preventative maintenance project as the structure is currently creating log jams and impeding natural flow/navigation of the river. The current structure is not maintained by any local or state agency and will eventually fall into the river creating more sediment and debris to enter the river. Throughout the year, we will continue to work with local partners, agencies, and landowners on assessing the

During the spring of 2018, a local contractor successfully installed a spawning enhancement site on the Rat Root River near Ericsburg.

Plans for 2019 include working with local contractors and the



Top:
Walleye spawning riffle installed near Ericsburg creates increased flow.

Bottom:
Trees planted near riffle site for increased erosion control.



Department of Natural Resources (DNR) Fisheries Division to remove log jams which will aid in walleye passage, install two spawning enhancement sites, and remove a bridge structure near Highway 217 while stabilizing the adjacent banks. The two locations for the spawning enhancement sites will be on the upstream side of the Galvin Line bridge near UT Road 198 and the other to be roughly one mile downstream of the snowmobile bridge crossing off of County Road 97. Both spawning enhancement sites will be installed in a similar fashion as the previous successfully installed sites in which a variety of spawning rock sizes are placed in an arc formation. This will

condition of the river and its surrounding habitat. To ensure the success of these projects, the DNR will continue to assess fish populations throughout the Rat Root River system.

An interactive story map of this work can be seen on our website at www.koochichingswcd.org/conservation-partners-legacy-grant-cpl

For more information about the Rat Root River Habitat Enhancement project, contact Eric Olson, Koochiching SWCD Resource Conservationist at eric.olson@co.koochiching.mn.us or 218-283-1175.



NEW NRCS MEMBER

Koochiching SWCD Welcomes
Matt Rose

"I grew up in North Dakota and Minnesota then graduated high school in Redwood Falls, Minnesota. After high school I attended St. Cloud State University receiving a degree in Field Biology with an emphasis on Wildlife Management. The last 5 years I was a Ducks Unlimited RIM/WRE easement consultant with the NRCS. As a consultant I planned and implemented native grass seeding and wetland restorations for landowners across 10 central Minnesota counties. I am excited to start my NRCS career here in Baudette, Minnesota. I look forward to meeting local landowners and assisting with the conservation efforts to improve the environment and increase their return on investment. When not at work I enjoy fishing, running, hunting, and spending time with my friends and family."

Baudette NRCS Office:
119 1st Ave., NW, Baudette, MN 56623
218-634-2757

matthew.rose@mn.usda.gov

SWCD CONTACT INFO

501 3rd Street, Suite 201
International Falls, MN 56649

PHONE: (218) 283-1180

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www.facebook.com/koochichingswcd

STAFF AND BOARD INFO

BOARD MEETINGS

Held on the first Monday of each month, (unless otherwise posted) in the Koochiching County Board Room located on the 1st floor of the County Courthouse :
715 4th Street in International Falls

BOARD MEMBERS

BOARD CHAIR	Ralph Lewis
BOARD VICE-CHAIR	George Aitchison
BOARD TREASURER	Eldon Voigt
BOARD SECRETARY	Richard Dreher
BOARD MEMBER	Al Linder

STAFF MEMBERS

DISTRICT ADMINISTRATOR	Pam Tomevi
RESOURCE CONSERVATIONIST	Eric Olson
WATER RESOURCE SPECIALIST	Sam Soderman
FOREST RESOURCE SPECIALIST	James Aasen
PROGRAM COORDINATOR	Jolén Simon

Invasive Species Alert: European Buckthorn

What Is It?

It is not a stretch to say that our region is often resistant to natural resource concerns because of our tough northern climate and resident's dedication to good landscape stewardship. Despite this, the range of invasive terrestrial plant species has been slowly creeping north into Koochiching County over the last decade. Many people are by now familiar with the tall stalks and fanning yellow flowerhead of invasive wild parsnip. Some may understand the difficult to distinguish non-native narrow leaved cattail and



Leaves: Egg-shaped, pointed at the tip, smooth, dark, glossy and finely-toothed. 3-5 pair of curved leaf veins. Leaves stay green late into fall.



Branch: Buds and leaves are sub-opposite, opposite, or alternate. Twigs often end in small (< 1/4") sharp, stout thorns.



Wood: Brown bark with elongate silvery corky projections (caution: native plums or cherries have a similar bark). Cut branch exposes yellow sapwood and orange heartwood.



Fruit: Large, round, berry-like clusters of black 1/4" fruit. Ripens in August and September. Each berry has 3 to 4 seeds.

MN DNR, Common Buckthorn Identification

the ecological challenges it creates while outcompeting our native broad-leaved cattail. But while we watch and discuss how to control these conspicuous species—and a dozen others—that have slowly invaded our road sides and travel corridors, another pest has crept right past replacing shrubs and trees in the places we spend most of our time, European Buckthorn. Like most invasive species, which denotes the tendency of these plants to push out and replace other plants in the areas they colonize, European or common buckthorn is also not native to Minnesota, as its name implies. Originally brought across the Atlantic from Eurasia for use as a windbreak and landscaping hedge, this pest has slowly crept north and west across North America in the preceding decades.

Buckthorn seed is spread over the landscape by birds and other animal's consumption of its dark purple-black berries. For this reason, the most common hot spots for a buckthorn invasion are areas around yards where birds are being fed or along migratory songbird routes.

Out of the many frustrating traits exhibited by this pest, the one that threatens our northern forested landscape the most and allows it to hide in plain site is buckthorn's shade tolerance. While most non-native invasive species are difficult to control and detrimental to native plants, the majority require full sun to thrive. In contrast, invasive buckthorn is able to grow and spread under an existing tree canopy, choking out the next generation of native and timber-valuable tree seedlings – making our northern forests less species rich and also less profitable.

Why Is It a Problem?

Landowners should be aware and vigilant as early detection is very important to mitigate its spread. Like other non-native, invasive species that find an ecosystem that is suitable to rapid growth, it threatens our native plant communities and health of the ecosystem in general by:

- Outcompeting native plants for nutrients, light, and water resources;
- Degrading wildlife habitat and recreation potential because of its sharp stiff thorns;
- Changing the chemical composition of the soil, making it less suitable for native species;
- Creating a dense shade canopy that does not allow light to reach ground plants, increasing erosion and reducing forest nutrient cycling;
- Lacking a natural control like insect or disease.

Story continues on reverse side...



Living with Invasive Buckthorn in Ottertail County

What Can I Do?

Effective buckthorn control is done in a number of ways. Plants 3/8" or smaller can be pulled by hand. Stems greater than 3/8" may be pulled using an "uprooter" tool. Depending on the size and magnitude of the plant's spread on a given property, cutting and herbicide applied to the stumps or an herbicide spray may be the most appropriate treatment.

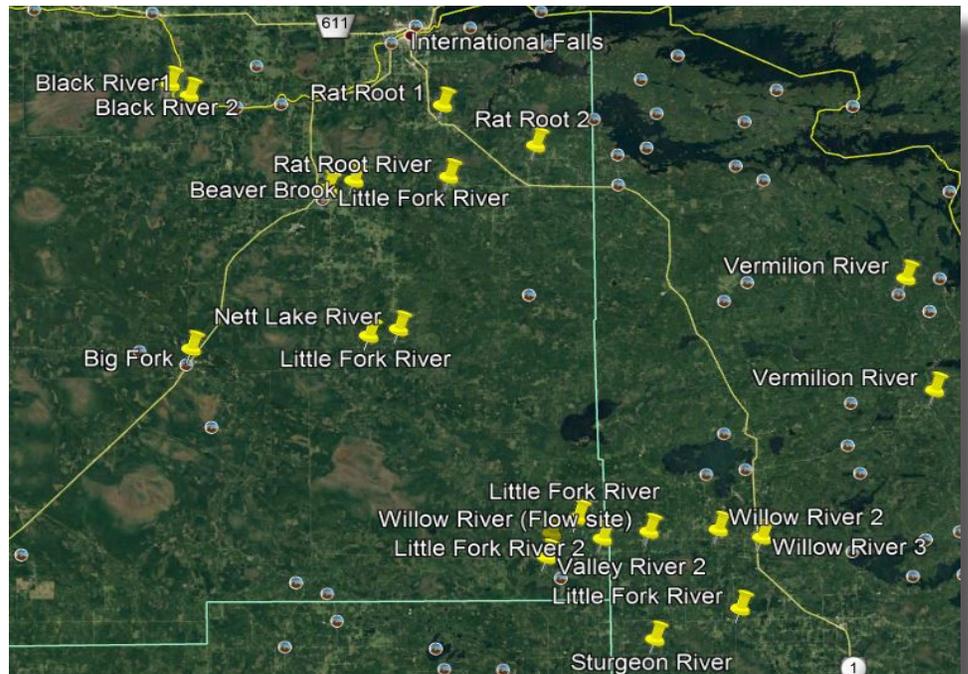
If you think you have European Buckthorn on your property, we can help distinguish between it and the few common look-a-likes that are actually native to the area. Our team is also here to give treatment and removal advice as well as research State and Federal cost-share assistance programs that may help landowners pay for the control of invasive buckthorn.

Fall and early winter are the best seasons for buckthorn removal projects. Native deciduous plants lose their leaves in autumn, but buckthorn leaves can remain through the winter making identification much easier when the rest of the forest is leafless (this is a general rule and identification of plants for removal should be carefully assessed before cutting or herbicide application). Buckthorn seed can remain productive in the soil for up to five years, so establishment of a monitoring schedule is important for successful control measures.

Recently, European buckthorn has been identified throughout communities and forestland in Koochiching County. But through landowner identification and action, this invader can be treated and its ecological costs minimized. Your Koochiching Soil and Water Conservation District is here to help.

Water Quality Sampling Update

Koochiching Soil and Water Conservation District has been partnering with the Minnesota Pollution Control Agency to collect and analyze water samples on rivers throughout the county. This work is done through a variety of grants that focus on multiple water quality parameters. Some of these parameters include; Total Suspended Solids, Total Phosphorus, Hardness as Calcium Carbonate, E. coli, Chloride, Nitrate and Nitrite, Sulfate, Ammoniacal Nitrogen, Chlorophyll, and Orthophosphate are a few of the many parameters analyzed. This sampling is mainly done during the summer months between May and September. Right is a map showing sampling locations from the 2018 season. Some of these locations will continue to be sampled into 2019 with others being dropped and added depending on funding.



Water Quality Sampling Locations in and around Koochiching County 2018