March 2020

Lake Leader

PROMOTING STEWARDSHIP OF POLK COUNTY'S NATURAL RESOURCES

INSIDE THIS ISSUE

SPECIAL POINTS OF INTEREST

- Knowledge on the pollutants that supports green algae populations and several ways landowners may be incorporating these pollutants into the lake.
- Introducing methods to decrease fertilizers containing phosphorus
- Learn about our Shoreline Restoration Program and previous projects.
- Job Announcements
- Mystery Snails established in Lake Sarah and preventative tips from transporting these invasive species to other lakes.
- MN BWSR Lawns to Legumes Program

CURB POLLTION: REDUCE PHOSPHORUS AND OTHER POLLUTANTS

All plants, including aquatic plants, require nutrients like nitrogen, potassium, and phosphorus to grow. Phosphorus is an essential nutrient required by plants to boost growth and improve overall health. When excess nutrients, like phosphorus, reach the lake it can fuel the overgrowth of aquatic plants as well as algae. Excessive plant and algae growth decreases water clarity, interferes with the recreational use of the lake, and diminishes oxygen for fish. Research suggest that just one pound of phosphorus can feed the growth of 300 to 500 pounds of algae. With such a huge ratio it's important to prevent as much phosphorus as possible from entering our lakes.

Phosphorus is a naturally occurring element that is found in rain, plants/organic matter, and soil, which we can't control, but we can control our own shoreland practices that can contribute phosphorous to the lake. Excessive phosphorus can get into lakes from shoreland properties in several ways, including:

- Excessive fertilizer application and runoff from lawns;
- decomposition of leaves and other plant material;
- erosion of soil, which has phosphorus particles attached to it;
- improper human and pet waste management, both of which contain high amounts of phosphorus;
- the use of household products high in phosphorus (floor cleaners, detergents, kitchen cleaners, etc.).

KEEP YOUR GRASS GREEN: KEEP THE LAKE CLEAN

Improper and excessive fertilization is a major source of phosphorous and nitrogen run off into our lakes. Phosphorus binds tightly to soil particles and soil and bank erosion is a major cause of phosphorus pollution in our water systems. Algal blooms tend to coincide with the most common times for lawn fertilization in spring and early fall. In fact, improper or excessive fertilization of lawns is one of the main sources of nutrient runoff pollution.

By law since 2005, Minnesota homeowners cannot use fertilizers containing phosphorus, except for exemptions for new lawns or when a soil test indicates a need for phosphorus.

When shopping for fertilizer, buy a brand that has a middle number of zero i.e. 22-0-15. If you have left over phosphorus fertilizer, using it on the garden is a good way to dispose of it.

Other herbicide and pesticide precautions to follow:

- Eliminate the use of fertilizers near water or wetlands.
- Before you consider fertilizing your lawn, aerate it first and see if that improves its health.
- Use the minimum amount needed to replenish the soil, based on soil samples, and apply at the right time of year, usually spring or early fall. Water lightly after fertilizing to ensure absorption by the roots and decrease the chance for runoff.
- Sweep fertilizer that has spilled on the driveway and other hard surfaces back onto the lawn to prevent runoff.

SHORELINE RESTORATION PROGRAM: UPDATE

About the Program

Last year was the startup of our new Shoreline Restoration Program. We're partnering with Prairie Restorations, located in Hawley, MN, to help design and install the best shoreline restoration catered to you.

Our district will assess your property by evaluating resource concerns that could potentially contribute to shoreline erosion or waste water runoff. We review soil type, land elevations, impervious areas, water fetch and much more to ensure we conserve and stabilize your lake shore.

Rain gardens can also be utilized to mitigate run off at higher elevations.

Why should you restore your shore with us?

The Shoreline Restoration Program provides technical assistance to meet your satisfactory needs. Our site plans are designed to diminish resource challenges and guarantee an aesthetically pleasing restoration area for you. The East Polk SWCD offers financial support up to **50 percent** cost share guidelines. Funding will cover any approved expense of your shoreline restoration or rain garden project. We also provide cost estimates of your shoreline restoration or rain garden before we start your project.

Maintenance

Established Shoreline Restoration and Rain Garden projects require little to no maintenance for water or weed management. However it can take up to two years to become established. During that time you will need to weed and water your restoration. Here's why: Lack of weeding in the first year or two will lead to an absence of desired natives due to "ugly weeds' out competing the native plants. Regular watering may be required until native plants reach maturity depending on soil type, drought, and dry periods. Nevertheless, by the third year you may only need to maintain your native plants once a month based on the suitability of your restoration.

For more information visit our website:
www.eastpolkswcd.org

Shoreline Restoration

Before After

Figure 1. *Summer of 2019 Shoreline Restoration project.*

Rain Garden

Before After

Figure 2. *Summer of 2019 Rain Garden project.*

Shoreline Restoration & Rain Garden Project: Summer 2019

Last summer the East Polk SWCD was contacted by a landowner with concerns of significant run off going down the steep sloped shoreline. *(Figure 1).* He had impervious areas from his house, driveway, and shed, that drained into the lake and could potentially collect pollutants. A site visit was completed to determine where runoff could be minimized. Prairie Restorations was contacted to establish a plan for a native plant mix that will help eliminate the resource concern and be visually appealing. The final plan included installing a rain garden up by the house to collect runoff from the house and driveway *(Figure 2),* and doing a shoreline restoration by planting a prairie species mix on the steep slope shoreline to help eliminate erosion and filter runoff from the shed.

POSITION ANNOUNCEMENTS

East Polk Soil and Water Conservation District

Job Title: Summer Intern
Location: 240 Cleveland Ave., P.O. Box, 57, McIntosh, MN 56556
Classification: Seasonal Hourly Employee
Salary Range: $12-$15/hour
Closing Date: Tuesday, March 31, 2020 at 4:30 p.m

The East Polk Soil and Water Conservation District is seeking a highly motivated, currently enrolled college student or an individual that has recently graduated college, to serve as the Summer Intern between May and August 2020. This position will assist full time staff in carrying out technical services for the District. The successful candidate will have an opportunity to gain experience and gain exposure to administration of the Minnesota State Buffer Law, Cost-Share Programs, monitoring MN DNR groundwater observation wells, water quality monitoring and sampling on rivers and area lakes, Wetland Conservation Act, and taking MN DNR lake levels. Other duties and responsibilities may include, but are not limited to, attending meetings with landowners, lake associations, and conducting public outreach through displays and presentations. There will be extensive interactions with landowners and community groups as well as local, state, and federal government to build partnerships and implement conservation programs. The successful candidate will prepare a brief report and present it to the East Polk SWCD Board of Supervisors once per month at the Regular Board Meetings. The report content will contain the selected candidate's accomplishments from the previous month.

To apply applicants must submit a cover letter and resume that contains three professional references. Please mail cover letter and resume to: East Polk SWCD, Attn: Rachel Klein, P.O. Box 57, McIntosh, MN 56556 or email to klein.eastpolk@gmail.com.

For specific questions regarding this position contact:

Rachel Klein, District Manager
Klein.eastpolk@gmail.com
218-563-2777

AIS TECH-TEMP/SEASONAL– POLK COUNTY, MN

Polk County Environmental Services has an opening for up to two (2) temporary AIS Tech positions, working at public water access sites doing monitoring and education on AIS as well as assisting the department with multiple projects. Eligible candidates will either be enrolled or seeking enrollment in a related post-secondary degree program or have a Bachelor's Degree in natural resources, biology, environmental science or a related field. Polk County will work with the candidate and college to accommodate internship credits if needed for a post-secondary degree program. A valid driver's license is required. Wage for this position is $14.66/hour.

Interested individuals may contact the Polk County Administrator's Office at 218-281-5408 or go online to http://www.co.polk.mn.us to view this job description and application. Applications for this position will be received until March 20th.

STOP AQUATIC HITCHHIKERS!™
Clean Drain Dry

POLK COUNTY AIS TASKFORCE
Clean in
Clean out

CHINESE MYSTERY SNAILS CONFIRMED IN POLK COUNTY LAKE SARAH

The Chinese mystery snail is a snail that has been shipped over to California from Asia in the 1800's for Asian seafood markets. These different shades of brown snails grow up to two inches long and are normally referenced as being the size of a golf ball. Lake and ponds that have these snails will often find the shorelines lined with dead or empty shells. The reason the CMS (Chinese Mystery Snail) got its name is due the fact how it gives birth in the spring, to young fully developed snails suddenly and mysteriously appear. CMS was likely released into the Niagara river in the 1930's from aquaria enthusiasts who accidentally released them. This invasive species can form dense populations and outcompete native species for food and habitat in ponds, lakes and streams. These snails can carry parasitic worms and can transmit trematodes that can kill waterfowl. There is currently no threat to human well-being with this infestation and it is believed that Lake Sarah has had them for many years as they are quite prevalent with a thick adult population this past summer. There is no evidence to support this theory but some believe that young CMS can be transferred from lake to lake by hitchhiking in bait buckets and boat bilges. What also doesn't help us is they can survive out of water for days by just tightly shutting their trap door to hold in their moisture. It's nearly impossible to get rid of mystery snails. The only way you can help is by making sure you are not transferring the snails and water out of the lake and report all new infestations in other lakes near you, for awareness is vital for preventing spreading them.

WHAT CAN YOU DO……..

1. **Don't Transport!**
   It is legal to have in your possession, BUT it is illegal to transport to another lake!
2. **Remove Snails**
   Remove the snails that wash up on shore and dispose of them into the trash!
3. **Spread the Word**
   If you find out that the lake you are on or near you has not only Mystery Chinese Snail, but any other type of invasive specie in it. Let other people know and remind them to be careful not to transport them to another body of water.

WHAT TO KNOW ABOUT: CHINESE MYSTERY SNAILS?

- Native to Asia, spread due to being released by consumers and aquarists who purchased them from live food markets in the 1930's
- These different shades of brown snails grow up to two inches long and are normally referenced as being the size of a golf ball
- Dead CMS (Chinese Mystery Snails) can litter shorelines and clog screens of water intakes in lakes and slow moving rivers • CMS can survive out of water for days by tightly shutting their trap door to hold in their moisture
- CMS pose a danger to native waterfowl as they can be hosts for parasitic worms •
- CMS got its name is due the fact how it gives birth in the spring, to young fully developed snails suddenly and mysteriously appear
- CMS are impossible to eradicate once introduced to a new waterbody
- The only way you can help is by making sure you are not transferring the snails and water out of the lake and report all new infestations in other lakes near you, for awareness is vital for preventing spreading them.

YOUR YARD CAN **BEE** THE CHANGE

Lawns to Legumes

Lawns to Legumes offers workshops, coaching, planting guides and cost-share funding for installing pollinator-friendly native plantings in residential lawns. The program also includes a public education campaign to raise awareness for pollinator habitat projects and will establish demonstration neighborhoods that showcase best practices.

Am I Eligible?

Minnesota residents anywhere in the state who have an area at their home that can be used for outdoor planting can apply for a combination of technical assistance (workshops, coaching) and cost-share funding. Proximity to areas where the Rusty patched bumblebee is likely to be present will be one factor considered when awarding reimbursement grants .

Why Does It Matter?

Minnesota is home to more than 450 native bee species. Pollinators also include butterflies, moths, beetles and native flies. All play a key role in pollinating many food crops and native plants, but populations have significantly declined worldwide in recent years. Population decline can be attributed to habitat loss and lack of related nutrition for pollinators, as well as pesticide use and pathogens.

The program aims to protect the federally endangered state bee, the Rusty patched bumblebee, and other at-risk pollinators. Even relatively small plantings of native flowers can help create conditions that are valuable to pollinators and can help build important habitat corridors.

Will Insects Benefit?

This program is specifically designed to address the needs of the Rusty Patched Bumblebee, a federally listed endangered species. But providing habitat for one pollinator helps most other pollinators as well.

Monarch Butterflies and other bees will benefit from this habitat, as will other animals including birds, amphibians and reptiles whose populations have been declining in recent years.

Another added benefit is that pollinator plantings contribute to cleaner streams, lakes and rivers as plant root systems filter pollutants and runoff before they reach our waterways.

How Does the Program Work?

One of the most important goals of this program is to support the long-term maintenance of these projects. Maintaining your project through the years makes consistent and reliable habitat that is more beneficial to pollinators, AND provides all of the additional ecosystem benefits of water quality, habitat for other animals and carbon sequestration. The resources BWSR is developing are intended to help support longer term habitat with guidance about planting, design, maintenance and other important issues related to pollinator plantings.

BWSR

#Lawns2Legumes

KEY WAYS TO INCORPORATE POLLINATOR HABITAT INTO YARDS

- Expand garden beds and plant pollinator habitat i.e.: native flowers.
- Remove existing lawn (using sod cutters, etc.) and seed a pollinator lawn seed mix that typically include no-mow fescues and flowers .
- Inter-seed flower into existing and increase mowing height, and decrease mowing frequency .
- Convert large areas to prairie vegetation.
- Plant your rain-garden with pollinator-beneficial plants.
- Incorporate flowering shrubs and trees in the landscapes such as choke cherry, dogwood, ninebark, hawthorn, cherry, plum, apple, maple and basswood.
- Provide nesting and over-wintering opportunities.
- Eliminate the use of insecticides and fungicides to the extent if possible.

East Polk SWCD Employees

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Programs:
WCA
Buffer Law
Feedlot Program

Email: Klein.eastpolk@gmail.com

Marea Schommer
District Technician
Programs:
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Office Hours:

Monday-Friday 8am-4:30pm

Located at:

240 Cleveland Ave, McIntosh, MN 56556

Call Us at: 218-563-2777

Visit Our Website:
www.eastpolkswcd.org

East Polk SWCD Tree Sales

We are still accepting tree order forms! Order forms are available at our office, 240 Cleveland Ave, McIntosh, MN, or on our website, www.eastpolkswcd.org. If you have any questions please contact Marea at 218-563-2777.

Please drop off or mail in completed order forms with payment to:

East Polk SWCD

240 Cleveland Ave

PO Box 57

McIntosh, MN 56556

East Polk SWCD

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