# Ripples

#### Lake Ripley Management District

Spring 2023

#### Vol. 30, No. 2

#### Lake District Office

Oakland Town Hall N4450 County Rd. A Cambridge, WI 53523 (608) 423-4537 Lake.manager@tn.oakland. jefferson.wi.gov.

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#### Lake Manager

Lianna Spencer Lake.manager@tn.oakland. jefferson.wi.gov (608) 423-4537

WEED HARVEST CREW

**Richard Moen** 



#### 30 Years of Education

As I was thinking about what to write about in this edition of the Ripples newsletter, I began thinking about the origin of the "Ripples". How did we get to year 30 of Ripples? What was the first Ripples like? Who came up with the idea and the name? Well, meet Richard Moen.

I spent an hour with Richard lately and he was able to explain how he proposed and executed the first edition of the Ripples in the Spring of 1993. At the beginning of 1993, Lake Ripley was granted "Priority Lake" status through the Wisconsin DNR's Nonpoint Source Water Pollution and Abatement Program. Lake Ripley was declared an outstanding natural resource needing protection and long-term management. As a result, nearly \$1 million in Priority Watershed Project grants were earmarked through 2006. This money was used to hire a project manager, develop a nonpoint source pollution plan, pay for community outreach, and provide landowner cost-share incentives to control soil erosion and sources of polluted runoff. Richard then explained how he wrote three grants for \$10,000 each and was awarded two of them. These grants were for conducting watershed inventory projects such as aquatic plant sampling and fish surveys. Richard said between the Priority Lake Project and the two \$10,000 grants, the Lake District was off and running.

This was the grant that really kick-started the Lake District, and soon thereafter the educational newsletter called the Ripples was developed. Richard decided that the District needed a way to provide important and educational information to the Lake District residents; a newsletter seemed like the best way to spread this kind of information! "I thought of the name "Ripples" because it was a fun play on our lake's name, and also how beautiful the lake can look with small ripples. I wrote most of those first articles while I was doing consulting work with the District", Richard explained. After creating the first draft of our own mailer, the District ran it by UW-Extension who had experience creating newsletters for other lake associations and districts. Richard said they saw it and didn't change a thing. "At the time, we were thinking that the Chair of the District

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#### **30 YEARS OF EDUCATION CONTINUED**

should have an editorial piece in the newsletter. As I was brainstorming fun titles for the pieces, I came up with 'From the Helm', because it identifies someone steering the boat. I thought it made sense. The Chairman typically oversees what's going on, just like a captain on a boat! Everyone on the District Board seemed to like it. I also wanted the newsletter to have an artistic flare, so I came up with the original logo which featured a helm and the sun." Richard then laughed a bit and said "Recently, the ripple or wavy line across the top of the page was eliminated – that also was one of my ideas."

I was impressed as we paged through the first few editions and saw what he was talking about. It is such neat history! We discussed adding the ripple effect back at the top of the page design to pay homage to our original newsletter. The Ripples is now at Volume 30 No. 2 and is very well received among the local community. If you see Richard out on the weed harvester or working in the Preserve, stop and say hi, ask a few questions, and thank him for his dedication to the Lake District.

-Jimmy DeGidio, Chairman



Jimmy and Richard Moen smiling on Lake Ripley with the first edition of the Ripples newsletter.





The ripples that helped inspire Richard with the title of our newsletter!

#### FIREWORKS AND YOUR LAKE

By: Kara J. Foley, New Hampshire Department of Environmental Services

On a hot summer's night, it's not uncommon for us to find ourselves enjoying a spectacular view of fireworks from a dock, boat, or shorefront. While every explosion of color and light brings happiness and amazement, many people don't realize that this pyrotechnic event could be harmful for the environment, especially your lake.

Inside every firework, there are many different toxic elements that are released when it explodes. These are necessary to produce the vibrant colors that we see and the body-shaking blasts that we can hear. Some of these elements include lead, barium, strontium, copper, aluminum, cadmium, and sulfur. Scientists have studied these elements for many years and know the negative impacts that they have in nature. Lead, for example, is known for its ability to pass through the food web and accumulate to toxic concentrations, which



Illustration by: University of Wisconsin - Cooperative Extensio

is especially harmful to top predators like eagles and loons. There are now laws and regulations to prevent the spread of lead throughout the environment. When it falls from the sky as a byproduct of a fireworks show, we are actually introducing this toxic element to the environment and threatening the wildlife that we love and cherish.

So, next time you are thinking about buying fireworks to light off for you and neighbors to enjoy or are invited to watch a fireworks show on the water, be sure to consider how these impact your lake and your environment.

#### **BIG BUZZ FOR BEES**

Faced with declining populations and limited information on the distribution and conservation needs of Wisconsin's 20 native bumble bee species, the Natural Heritage Conservation Program created the Bumble Bee Brigade. This citizen-based monitoring project trains volunteers to survey for and photograph bumble bees. In its pilot year, 93 volunteers submitted 845 observations, including finding the federally endangered rusty patched bumble bee in seven new counties, bringing the total to 28 counties with recent observations!

The rusty patched bumble bee is found in a variety of habitats including prairies, woodlands, marshes, agricultural landscapes and gardens. They are one of the first bees to emerge early in the spring and among the last to go into hibernation. That said, rusty patched bumble bee requires a constant and diverse supply of flowers that bloom throughout the colony's long-life cycle to meet its nutritional needs. It's a



Rusty patched bumblebee – see the rusty patch on its back?

good thing our Preserve has woodlands, wetlands, and prairie habitat to ensure enough food for the season. This District is completing our first Bumble Bee Brigade survey in early May. Let's hope we find some rusty patched bumble bees! To learn more about the Bumble Bee Brigade, go to https://wiatri. net/inventory/bbb/.

#### THESE WATER ANIMALS MIGHT SURPRISE YOU!

By: Kim Becken, Extension Lakes

Just as we are drawn to water, there are many plants and animals that rely on water for sustenance and their home (habitat). These living creatures (the biota) inhabit our lakes.

Animals are just one small portion that utilize lakes. We often think of animals as mammals, however, over 95% of animals are invertebrates and many of those are aquatic! Let's take a closer look at these aquatic animals; there are five distinct groups.

- 1. Flatworms, rotifers and roundworms each help consume and decompose matter that ends up in the water or sediment of a lake.
- 2. Mollusks include snails, mussels and clams which eat microscopic algae or filter water through their bodies as they feed, which removes zooplankton, phytoplankton and detritus from the water.

# What's this stuff?

Zooplankton – microscopic floating animalsPhytoplankton – microscopic floating plantsDetritus – dead or decaying organic matter

- 3. Aquatic earthworms and leeches eat organic muck or latch onto other invertebrates or fish for their food source.
- 4. Crustaceans, spiders and insects often become food for other animals in the lake community.
- 5. Fish are the most commonly known and are the vertebrates in this group. There are six major families of fish that call freshwater lakes their home
  - a. Ictaluridae Catfish and bullheads are in this family, and are bottom feeders that can survive in stressful conditions including low oxygen and high temperatures.

- b. Salmonidae This family of fish includes trout, which prefer clear, cooler, and welloxygenated water.
- c. Esocidae Muskellunge and pike are part of this family. These fish prefer shallow, warmer bodies of water with lots of aquatic plants.
- d. Clupeidae This family is comprised of the alewife and shad species that eat zooplankton and are, in turn, food for other larger fish.
- e. Centrarchidae This is the largest fish family that includes species such as bass, crappie and sunfish. They may be the most prevalent in your lake.
- f. Percidae Walleye and perch, both of which are very adaptable to different types of lake environments, belong to this family.

All of these animals, and the plants in which they live in and amongst, operate in a delicate balance of lake life. Let's keep in mind this unique balance as we work near, play in, and protect our wonderful water resources!



A planaria, or flatworm.





A common crayfish found in Lake Ripley.

A pumpkinseed caught on Lake Ripley.

## 30X30

30x30 is a world-wide conservation effort to curb climate change and habitat loss by conserving 30% of the Earth's surface in natural ecosystems by the year 2023. On land, this would mean protecting forest, prairie, wetland, rainforest, tundra, and desert ecosystems. On water this might mean ocean areas where most creatures live like kelp forests and coral reefs, as well as the littoral zones of lakes and ponds and river systems.

This ambitious plan might seem like "mission impossible". But the numbers tell a different story. Many acres in the USA, for example, are already mostly protected in our national park system, our national and state forests, and even places like our 207-acres of Lake District Preserve!

Why this focus on natural ecosystems? The native plants of these systems, whether forests or prairies or wetlands, for example, are very good at pulling CO2 out of the air and sequestering it in the soil. These ecosystems are also great habitat for the wild creatures.

You might think this means that farmland might be endangered by this plan. But in Missouri they are raising cattle on restored prairie, while also "raising" grassland birds and pollinators and sequestering CO2 in the soil! This is the kind of winwin solutions the 30x30 campaign is promoting.

We have been thinking about 30x30 at our local level, the community level. We don't need governments to do everything! Every private yard could contribute to 30x30! Could 30% of your yard become a woodland garden, prairie garden, raingarden or shoreline buffer garden? Could we achieve national goals in our private yards? That old slogan, "Think Globally, Act Locally" fits this situation!

Our American devotion to lawns accelerates climate change! There are 50 million acres of lawn in the USA. Lawn grass is a plant imported from England, where summers are cool and wet, and so deep roots are not necessary. Lawns consume 3 trillion gallons of water per growing season because of this. Where does this water come from? Groundwater, which also supplies your household use of water. Lawns also consume 59 million pounds of herbicides/pesticides and 3 billion gallons of gasoline (for lawnmowers) per growing season!

Think of the opportunity we have as individual homeowners to help curb climate change and provide natural habitats right in our own yards! Think about our grandchildren, and the world we hope will be theirs.



The District is doing our part! Here is a picture of the start of the trail at our 207-acre Preserve.



#### **RESTORING THE SOIL**

Bill (the farmer we featured on the front page of the previous Ripples!) kindly invited Jimmy and me over to his farm to check on how his cover crop, ryegrass, was doing. This past fall, Bill planted 125 acres with this cover crop and the crop far exceeded his expectations!

When we arrived, we could immediately see a field of something green! Knowing it must be the ryegrass, we were excited to hear about the success of the crop and learn about its benefits to soil health. This annual cover crop prevents erosion, conserves moisture, adds organic carbon, prevents weeds, and reduces compaction! Ryegrass is known for being an erosion fighter; it has an extensive soil-holding root system that establishes quickly and can grow in a variety of soils. This crop is generally used to protect the soil between corn harvest and the planting of soybeans the following year. It is conservation practices like this that can play a big role in protecting Lake Ripley's water quality.

Through the Jefferson County Soil Builders, Bill will be



Jimmy and Bill standing in one of the fields planted with rye.

hosting a Farm Field Day at his farm on Highway 12. If you are interested in learning about no-till farming and other conservation practices, please join us! Pre-registration is required, so reach out to the District office for more information.

# THE SWALE PROGRAM

The District is implementing a new program to improve water quality in the lake by improving the absorption of run-off in the stormwater swales (sometimes called ditches) constructed during the rebuilding of Ripley Road. A stormwater swale is an open, manmade waterway that holds and transports stormwater runoff. Swales are designed to intercept, hold, transport, and absorb runoff water. They are important in preventing flooding along Ripley Road.

The size of the swales was determined by engineering studies done specifically for Ripley Road to reduce the impacts of rainfall events to Lake Ripley. Therefore, it is very important that the size, shape, capacity, or location of the swales are not altered. However, the functioning of these swales can be improved by planting appropriate native plants in them!

Turf grass and ordinary, cultivated flowers do not have the necessary rooting capacity to improve the stormwater function of the swales.

Native plants all have deep fibrous roots that can withstand the unusual conditions of swales, with their alternating dry/deep water periods. The appropriate selection of native flowering plants, grasses, and sedges can and will reduce erosion, trap pollutants and sediments, and greatly increase infiltration of water that



A native vegetated mat being rolled out.

would otherwise eventually reach Lake Ripley.

So – the District is implementing a modified costshare program to provide assistance to owners whose frontage has been changed by these swales on Ripley Road. Because the swales are in the Town right-of-way, this agreement would not include an easement, but rather an agreement to care for the planting. We decided to focus our initial efforts on Ripley Road, but anyone in the near-lake watershed can apply for this program.

Please reach out to us or visit www.lakeripley.org/ programs for more information! Let's convert our turfed ditches to thriving swales!

## **ETIQUETTE FOR BOATERS AND JET SKIERS**

While it may seem like boating is a harmless activity, it actually can have many hidden physical, chemical, and biological impacts on your lake. Reduce your impact on our lake by following these basic tips:

- \* Clean your boat while on land! Never clean your boat while it is in the water; trailer it and clean it on shore away from your lake.
- \* Clean your boat with elbow grease! The chemical mixture that you may use to clean and polish your boat every season most likely contains chemicals that could harm your lake's ecosystem, such as chlorine, ammonia, and phosphates. Instead, skip the chemicals and use old-fashioned elbow grease and absorbent drying cloths that can keep any unwanted materials from entering the lake.
- \* Don't spill gasoline into the lake! When the hydrocarbons that make up gas and oil get into water, they change the amount of oxygen that is available to organisms and can cause serious problems throughout the ecosystem. Be extra careful not to spill any gasoline when fueling up your boat.
- \* Follow No-Wake rules! Waves and wakes from your boat carry a lot of energy. When they crash into the shore, they can actually weaken the shoreline and cause erosion. Lakeshore erosion increases the amount of sediment in the water, releasing nutrients up into the water, which then increases algae! When driving your boat, make

sure that you follow all of the established boating guidelines such as "200-foot No Wake" zones, obey set Slow-No-Wake times and be courteous to other boaters and swimmers.

- \* Slow-boating in shallow and vegetated areas! When you boat in shallow waters, the propeller can stir up the bottom sediments and uproot vegetation. Avoid shallow areas to minimize harming the habitat of aquatic organisms that use shallow portions of the lake and to avoid increasing the likelihood of algae!
- \* Clean, Drain, and Dry! Getting into the habit of inspecting and cleaning your boat is one of the easiest ways you can protect your lake from invasive species. This not only saves your lake but it also saves you money, time, and frustration. Be aware of any special laws and regulations that some states have put into place to enforce this practice as well.



# A RASH OF VIOLATIONS

The Lake District has been receiving an alarming number of reports about near-shore violations which have an impact on our lake. Most of these are about trees being removed without permits in the 30-foot lake-shore zone where a permit is required for almost any project involving digging, building and/or tree removal. This is the law, everyone! It is meant to protect everyone's lake!

Permits must be obtained before work actually commences! Do-it-yourselfers are not exempted.

Permits can be obtained from Jefferson County Zoning via their website https://www. jeffersoncountywi.gov or by calling 920-674-7130.

It is vital for lake residents to know and abide by laws and ordinances designed to protect the wellbeing of the lake! These are Town and County and State laws and ordinances. The Lake District has no authority to enact laws or ordinances.

## **CRITICAL HABITAT DESIGNATION PUBLIC HEARING**

Date: 05/18/2023 Time: 6:00 p.m. - 7:30 p.m. Location: N4450 County Hwy Cambridge, WI 53523 Contact: Arthur Watkinson, Arthur.Watkinson@ wisconsin.gov or 608-220-6245

This public hearing will give information and background on the Lake Ripley Critical Habitat Designation started in 2006. The hearing will go over where, why and how these areas were selected and how the designation may impact Lake Ripley Management District members.

Members of the public are encouraged to give feedback on the proposed designated areas.

Letters will be mailed out to riparians adjacent to and outside the proposed areas. The hearing will be advertised in the local Cambridge Newspaper and the Lake Ripley Management District's Ripples Newsletter.

Be sure to visit, to LIKE and FOLLOW our Facebook page at: www.facebook.com/LRMDLS2020

Go check out our website www.lakeripley.org for more information on the Lake District!

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