



Fostering the science and art of soil and water conservation in Michigan and the Great Lakes Region.

Greetings to all and I hope you are enjoying our spring weather with your favorite outdoor activities whether it's backyard or balcony gardening, planting the farm fields, mushroom or ramp hunting, birding, hiking, fishing, etc. Last week, I managed to get out for some snorkeling in Iron Lake, which is in the Irish Hills region off of Old 12 in Lenawee County. Making a turn to put the sun directly behind me, I was treated to the site of a school of newly spawned fish, each not much bigger than a grass seed, taking cover in the tall spatterdock and sparkling in the reflected sunlight. It was a reminder of the tremendous natural resources we have in Michigan and how we don't necessarily have to drive four hours north to find them.

The header photo above is a different story, however, and a reminder we still have a ways to go in establishing voluntary best management practices (BMPs) around the farm. For example, a two-stage ditch, a filter strip and a cover crop are of BMPs demonstrated to reduce soil and nutrient losses and improve water quality. The open question is, as it has been for a long time, "can we as a state sustainably reap the economic benefits of our soil and water: food, fiber, feed, and fuel, in a way that protects our natural resources generations?" Ultimately, we're more likely to protect what we know and love. As we grow the food, do the research, promote the best practices, engage the stakeholders we should remember there is another "side of the equation," getting out to experience and enjoy the places we need to protect – and bringing along the kids. Till next time then, all the best. -John Freeland (ed.)

PRESIDENT'S MESSAGE TO CHAPTER MEMBERS

The Michigan Chapter of the Soil and Water Conservation Society is seeking member volunteers to serve on its Nominations Committee. The primary job of the committee is to develop a list of prospective candidates for the chapter's elected offices. Prior participation on the committee does not exclude you from serving again; we welcome experience. We also welcome new perspectives. If you have not participated before, serving on a committee is a great way to get involved in your chapter and to provide input on its focus and direction. Please email me (oneilg@msu.edu) if you interested.

2021 ANNUAL ANR SEMINAR

Another award for our Chapter! This is great news, particularly in light of the many bright and actively engaged state chapters also worthy of this award. Congratulations to all who made it happen! The award letter follows:

Dear Michigan Chapter,

Congratulations! It is with great pleasure that I inform you that the SWCS Board of Directors has named you as the 2021 recipient of the Chapter Achievement Award for your A Matter of Balance: Conservation Agriculture in Uncertain Times (Bringing Conservation Science to Practice) event.

This year's award winners will be recognized virtually during the 76th SWCS International Annual Conference taking place on July 26-28, 2021. Award winners will also be recognized in the final conference program, on the virtual event platform, on the SWCS website, SWCS social media, and in an edition of the SWCS monthly member newsletter.

Once again, we congratulate you on receiving the Chapter Achievement Award.

Sincerely,

Clare Lindahl

SWCS CEO

INTRODUCING CHAPTER MEMBER PROFILES! - from President Glenn O'Neill

Starting with this newsletter and continuing in subsequent editions, the chapter will highlight a current member by asking them 10 questions (plus a bonus one). Our first profile is of Korie Blyveis. Korie currently works for the Cass County Conservation District, previously worked for Newberg Township and MSU Extension, and is a graduate of Western Michigan University.

Thanks for being a member Korie!

1. Where do you work and what do you do there?

Cass County Conservation District, Administrator and County enforcement agency administrator for the County Soil Erosion and Sedimentation Control program (SESC).

2. When and why did you join MI-SWCS?

I joined the National SWCS in 2018 so that I would be informed of latest conservation activities/programs around the country - basically to be somewhat in the loop. I joined the MI chapter for the same reason, for more local programming.

3. *What do you see as a major challenge to conservation efforts in Michigan?*

Finances. The Districts need more funds to adequately staff and deliver all the wonderful programs that are possible. Next, municipal and corporate cooperation with common goal/ethic to protect natural resources for all.

4. *How have you participated in the MI SWCS chapter?*

I have only read the emails and I believe I participated in an online training - I must admit I have not had the time or travel funds to participate in trainings and many of them are more geared toward agricultural interests.

5. *How do you feel your membership to the MI SWCS is valuable?*

As an administrator I think it is important for me to have some awareness of the Statewide efforts and I hope having more members will give the MI SWCS more strength as an organization.

6. *What advice do you have for aspiring or early career natural resource professionals?*

Focus. Try to focus on what area is most important to you - it is so easy to get pulled in many directions. But, at the same time be sure to stay aware of all the program/activities surrounding you so you might cooperate with others to boost their focus and yours at the same time.

7. *Where were you born, and where did you grow up?*

I was born in Borgess Hospital in Kalamazoo, Michigan. I grew up in Portage, MI.

8. *What is your favorite place in Michigan to visit?*

When I was a child Warren Dunes was the place to go and still brings a smile to my face, but these days we get pretty excited about heading up to Emmet County for Blissfest, the beaches, and the dark sky.

9. What do you like to do in your free time?

Bird watch - pretty much all the time stopping by farm ponds and taking small hikes in the woods looking for birds.

10. Best place to eat in your area, and what to order there?

Broadway Cafe - the gyro and fish soup on Friday. In Three Rivers it would be the Taco Truck when it's around!

***Bonus:** What is your favorite dessert?*

Ice cream - current favorite topping is pecans, local maple syrup, and crumbled bacon.

Isn't it great to hear from our members and find out what's going on from their perspective? Plus, we can always use more restaurant tips, being on the road and all. If you would like to be profiled in the next Chapter Newsletter, send a message to me or one of the Executive Council members.

FEATURE ARTICLE

For this quarter's feature article, we've selected a recent journal paper by our Region 3 Director, Jerry Miller. The article is broad-ranging and should appeal to wide-ranging interests. The paper, **St. Lawrence Seaway: Western Great Lakes Basin (scirp.org)** (2020) by Kenneth R. Olson and Gerald A. Miller, is **available in its entirety, thanks to open-source publishing**, through a link to the **[Journal of Water Resource and Protection](#)**. In the introduction, Olson and Miller state the following:

“The primary objective of this paper is to document the environmental threats [4] [5] to the Western Great Lakes basin which has only one natural outlet, the Detroit River which flows naturally into Lake Erie. These environmental challenges...(include) the impact millions of people living in the Western Great Lakes basin, navigation on the St. Lawrence Seaway, thousands of shipwrecks [1] [6] [7] at the bottoms of Lake Huron, Lake Superior and Lake Michigan, disposal of treated and untreated industrial and urban waste into the lakes, pollution of the sources of drinking water, land use change, shoreline erosion, building structures on the shoreline banks, underwater oil and gas pipelines, invasive species including Asian carp, and record high Western Great Lake water levels [8].”

Do you know there are some 6,000 shipwrecks and over 30,000 sailors have been lost in the Great Lakes? And that the high water records of Lake Michigan were recorded in 1986-87, *despite the fact* that the Illinois River was re-routed to the Mississippi River in order to drain Chicago wastewater away from the lake? These are just a couple of the many interesting facts presented in the paper.

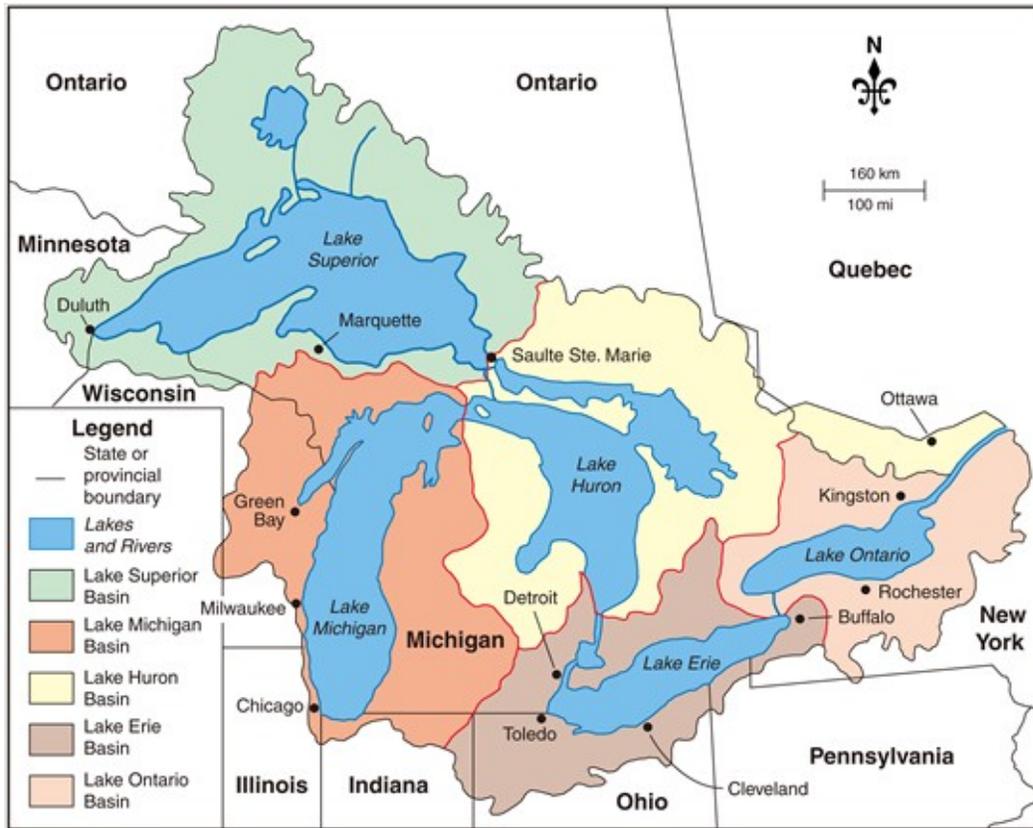


Figure 1. Great Lakes Basin and individual lake sub-basin map. (Olson and Miller, after Greenburg, 2020)

IWR STATEWIDE DRAIN TILE MONITORING PROGRAM

Building on drain tile monitoring piloted in Lenawee County, MSU’s Institute for Water Research is inviting farmers to partner in a similar state-wide program. Janelle Brose of Farm News Five interviews Alaina Nunn, who has previously presented at our Chapter ANR Seminar. [GO TO VIDEO](#)



MODIS IMAGE This image taken on May 18, 2021 shows the contrasting land cover in northern Michigan (green forested) to the agriculture-dominated land use of southern Michigan, particularly in the Saginaw Bay area. Western Ontario is heavily agricultural, as well. In a month, or so, as crops leaf out, essentially all of the land area will be green.



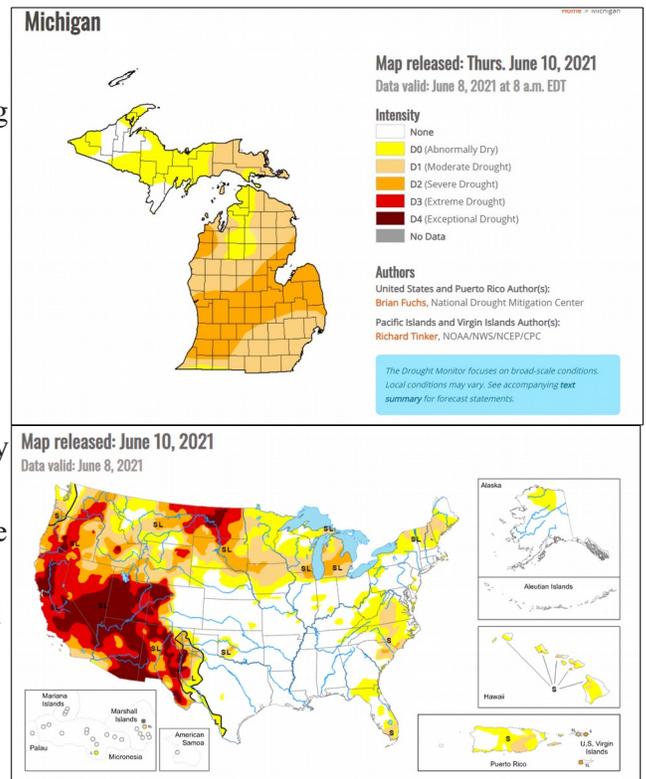
Pictures for the Newsletter

Have some interesting pictures to share with a Michigan Soil & Water theme? If you would like to share them with the Chapter, please send them to John Freeland, Newsletter editor at freeland.nrc@gmail.com

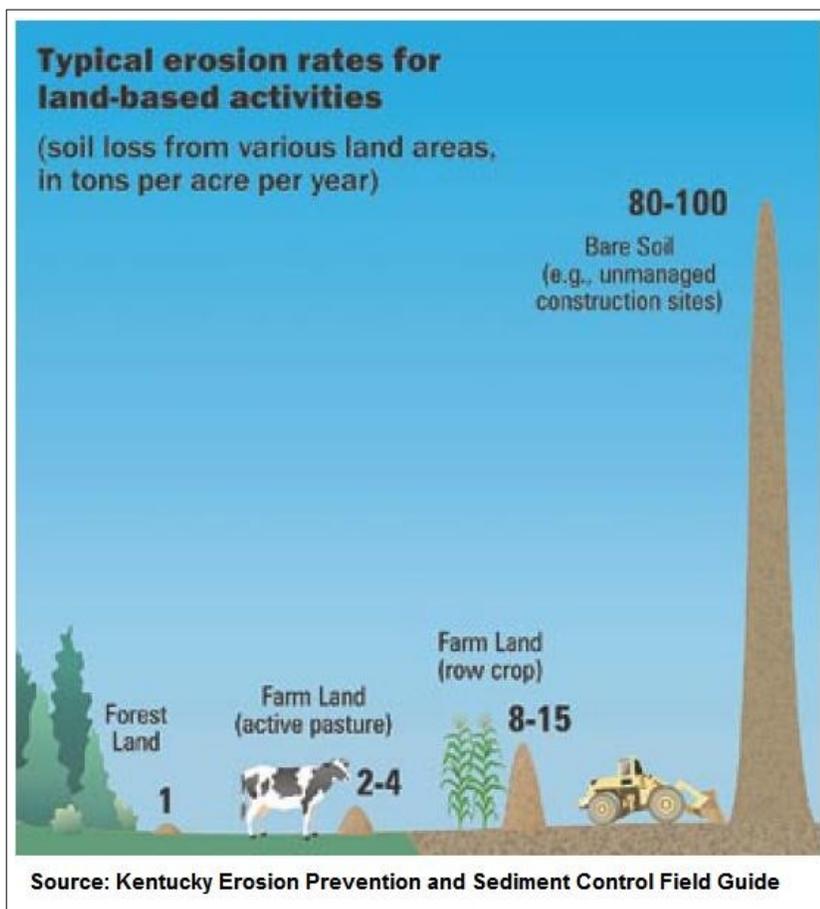
NATIONAL AND STATE DROUGHT CONDITIONS

Weather and climate conditions across the nation can have an impact on farm production and markets. The drought situation out west may ultimately affect farming decisions in Michigan, which, in turn, may have influence on soil and water conservation practices. The latest **United States Drought Monitor** map indicates worsening drought in the southwestern United States and increasing drought in Michigan.

Most of Michigan as of the second week of June is in moderate to severe Drought. I’ve seen rotary pivot spray irrigation equipment running already in Lenawee County, something we usually don’t see until later in the summer. The really big problem is out west with Lake Meade, which millions depend on for water, is at record low levels



FYI – EROSION RATES BY SELECTED LAND USE



As we are now well into the construction season, it may be a good time to consider the consequences of unmanaged or poorly managed construction sites. Sediment, regardless of its source, has many negative effects on natural resources and infrastructure. More sediment in the water means higher treatment costs at municipal water treatment facilities. Higher turbidity in lakes and streams makes it harder for fish and other aquatic animals that rely on site to see prey and predators. Higher turbidity decreases the depth to which sunlight penetrates the water, thereby making it more difficult for macrophytes to establish on the bottom and compete with nuisance algae for nutrients. One of the biggest, if not the biggest, threat to freshwater mussels, which are filter feeders, is

siltation and the loss of suitable gravel substrate. This graphic is from a Kentucky state publication but is likely, for the most part, applicable here in Michigan.

MEMBERSHIP

If you are not currently a member of the Soil & Water Conservation Society, membership has many benefits. By joining the national Society, members are automatically affiliated with their state chapters. This is an opportunity to network with professionals in the conservation field and support the Society's critical mission. Information about how to join is available through the link:

<https://www.swcs.org/get-involved/join/>

Links of Interest

[Michigan Soil and Water Conservation Society - YouTube](#)

[North Central Region | Soil and Water Conservation Society \(swcs.org\)](#)

[Great Lakes Echo - Environmental news across the basin](#)

[Michigan Farmers Union | United to Grow Family Agriculture](#)

[American Farm Bureau Federation - The Voice of Agriculture | Homepage \(fb.org\)](#)

[W.K. Kellogg Biological Station • Michigan State University \(msu.edu\)](#)

[Great Lakes Restoration Initiative | Great Lakes Restoration Initiative \(glri.us\)](#)

[Home | Hoosier Chapter of the Soil and Water Conservation Society \(hoosierchapterswcs.org\)](#)

[GLIN: Great Lakes Information Network - Great Lakes Commission \(glc.org\)](#)

[MSU Water Withdrawal Statistics](#)

[Executive Council](#). Here are the current officers with those newly elected shown in *italics*:

Glenn O'Neil, President

Katie Droscha, Vice President

Kelly Goward, Treasurer

Rebecca Bender, Region 1 Director

Gerald Miller, Region 3 Director

Shelby Burlew, President-elect

Tim Harrigan, Past President

Daniel F. Kesselring, Secretary

Zachary Curtis, Region 2 Director

Dan Busby, Statewide At Large Director

John Freeland, Newsletter Editor