

W. J. Breckenridge Chapter Izaak Walton League June 2023





A Century of Conservation Leadership

Coming Events

June 2023

- 13 Board of Directors Meeting 7 pm
- 27 Social Educational Meeting 7:30 pm
 Clinton Dexter-Nienhaus, Head
 Naturalist for the Friends of Sax-Zim Bog

July 2023

- 11 Board of Directors Meeting 7 pm
- 25 Social Educational Meeting 7:30 pm

August 2023

- 8 Board of Directors Meeting 7 pm
- 22 Social Educational Meeting 7:30 pm



Social Educational Meeting: Tuesday, June 27, 7:30 p.m. Clinton Dexter-Niehaus, Sax-Zim Bog

Clinton Dexter-Nienhaus, the Head Naturalist for the Friends of Sax-Zim Bog, has held the position for the last 8 years. He will share his knowledge of the broad diversity of this part of the Iron-Range. This position includes outreach, species documentation, and more, all the while sharing the region with visitors during all seasons through field trips, webinars, and more. He has an undergraduate degree in Environmental Biology from St. Mary's University in Winona, MN, as well as a Master's in Environmental Education from the University of Minnesota-Duluth. His interests range far and wide, and like many naturalists, loves anything and everything about the natural world. Specific interests include conservation of rare and endangered species, prairie and bog ecosystems, odonates, orthoptera, moths, spiders, lichens, mosses, fish, amphibians and reptiles.... the list goes on!

"An increasing number of visitors are interested in the broader biodiversity of the greater Sax-Zim Bog ecosystem, especially during the non-winter months. We have now documented over 3100 species in the bogs, upland forests, river corridors, and hayfields found across this vast ecosystem. This program will share some of the natural history of the amazing diversity of species found in the area, including those groups that draw visitors during the non-winter months."

Thank you letter

We received this excellent report from Shaina Sabel Westhoff, one of our very successful scholarship students. Thank you, Shaina!

Hello,

I am Shaina Westhoff, and I wanted to thank you for your generosity and support. The Walter J. Breckenridge Chapter assisted me at South Dakota State University via scholarships back when I was Shaina Sabel at Anoka High School in 2008. I graduated in 2012 with a Bachelor of Science in Environmental Management and a Bachelor of Science in Agronomy with a minor in Soil Science. Since then, I have worked in the private industry as an Agronomist, returned to SDSU for a Master of Science in Plant Science, earned a Research Associate position, and recently completed my Doctorate of Philosophy in Plant Science at SDSU in Fall of 2022.

My current role is as a Research Associate for Dr. David Clay who works largely in soil carbon, greenhouse gas emissions, and soil salinity. Much of the work I do in this Lab is focused on identifying barriers to agricultural conservation practice adoption (i.e. reducing tillage, utilizing cover crops, and improving fertilizer efficiency on the farm) and the impacts these conservation practices have on crop yield and soil health. My PhD research focused on saline and sodic soil reclamation strategies; this problem is of growing concern in large areas of South Dakota and can lead to mass erosion events.

Thank you again for your generosity and support as I advanced my education. I have been blessed with many opportunities as an outcome of my education, and the investment your chapter made in me is very much appreciated. Beginning this fall, I will be teaching full time at SDSU, and I look forward to working with the next generation of farmers, conservationists, and scientists. Thank you.

Sincerely, Shaina Westhoff, PhD.



Board of Directors Meeting Highlights: May 9, 2023

- Pancake Breakfast: We had a few items left over, but we cleared expenses and made \$725. Good community event!
- Scholarships Five returning scholars one has graduated. Three additional really good applicants. Motion was passed to raise the scholarships to \$1,000 starting next year.
- Willow plantings: As river has gone down, Tim has been planting (40 as of today). If these take root, we can root more and transfer more to the island. Dogwood are budding out and we will monitor them as they take root.

Pancake Breakfast May 3, 2023





They all came – in cars, on bikes, and on foot.



Volunteers welcomed young and old alike.



Our raffle items helped pay for the spread.



We cleared expenses and made \$725



Thanks to volunteers who helped with setup!



Lots of opportunities to meet old and new friends.

Pictures provided by Karen Ostenso, Larry Kennebeck and Tim Johnson

Floodplain Experiment



Sandbar willows planted on north end of Banfill Island

The floodplain on Banfill Island is experiencing some of the same challenges as the one further downstream at Crosby Farm Regional Park, namely the lack of regeneration of cottonwood. We learned about the Crosby Farm situation at our monthly educational meeting from two leaders in the conservation of our great river.

Our Breckenridge Chapter House is part of the of Mississippi National River & Recreation Area (MNRRA) whose superintendent, Tucker Blythe, addressed members at our May meeting. Tucker reminded us that MNRRA is 72 miles long in 5 counties and 25 communities (Dayton to Hastings). Anna Waugh of the Mississippi Park Connection (MPC), a partner of MNRRA, joined him and gave us a good understanding of the work the two organizations accomplish together.

Tucker has led MNRRA for a little under 2 years, following John Anfinson who had been in the

position since 2014. Anna has been with MPC for more than a decade and is currently the Interim Executive Director. We learned a lot about how the two organizations support each other in conservation from a particular ongoing project at Crosby Farm.

Anna explained her theory that the unusually long period of high water in 2019 (46 days) which was 13 days more than the previous record, may have caused even some of the usually flood tolerant trees to die. The cause of this extended high water is partially due to the upstream agricultural practice of drain tiling to get water off the land as fast as possible. This high water, along with the devastation of the ash trees (representing over one third of that forest) by the exotic emerald ash borer, a higher density of seedling munching deer and heavy girdling of mature trees by beaver, is stressing the forest in new ways. Although the temperature along the river is generally 6-8 degrees Fahrenheit lower than the surrounding urban area, warmer winter lows associated with climate change are increasing, allowing pests to overwinter and spread north. To restore the forest, MNRRA and MPC needed to know which species of trees to plant. Some of these trees may live for 200 years so they need to do their best in choosing the species that will thrive under the future conditions.

To scientifically study this, MPC brought support and volunteer staff together to join a national silviculture study (the first urban site with a heat island effect) planting 24 plots of trees (1,200 trees altogether) to look at adaptive capacity. Of the 54,000 acres in MNRRA, less than 100 are owned by the National Park Service, so, Crosby Farm as the largest publicly owned flood plain piece of MNRRA made sense as the place to do the study.

The plots were labeled either "resistant" (restoring to precolonial forest species), "resilient" (future forest with fewer species but still native), or "transitional" (trees from the southern river like catalpa and sycamore) plus control plots. After two years it was found that the "resilient" plots were doing the best. A third of the "transitional" trees succumbed to the polar vortex winter of 2021 (6 days in a row of -20F) but sycamore were doing very well. Running this experiment on St. Paul land allowed more flexibility than it would have if done on NPS land. Results of this study will be shared with other National Parks to use as a model and hopefully provide a successful example of climate adaptation.

If you've made it over to our island across from the Chapter House in the past few years, you've probably noticed some problems with regeneration of the native trees along the river bank. Beavers who lack easy access to their preferred habitats, have been girdling the giant cottonwoods and deer browse off all the seedlings as soon as they start growing. Erosion is normal along rivers and islands gradually move downstream, but without roots to hold the banks together, the process is speeded up. Several islands just below the Coon Rapids Dam have disappeared in the last century. In an attempt to stabilize our flood plain island, we planted sandbar willow on both upstream and downstream ends this year. The timing on planting the willow stems was difficult due to the major flood level reached just at planting time so they were stored along the riverbank with the roots under mud until the river subsided. The MPC project in Crosby Farm uses raised gravel bed nurseries for their trees, a technique that allows easy removal for planting just when the river levels reach the right stage.

We hope to reinstitute an antlerless bow-hunt on the island in the fall to decrease the deer population closer to pre-colonial densities. As another defense against herbivory, we have been treating a few cottonwood volunteers below the Chapter House with deer repellent and plan to protect some with tree tubes.

Maybe, as the Banfill Island canopy opens up further with the loss of ash and cottonwood trees, we can partner with MNRRA and MPC to plant tree species they have demonstrated will survive. They are looking for partners.



Anna Waugh, Executive Director (Interim) Mississippi Park Connection

Anna Waugh has served Mississippi Park Connection in many positions over the years including as the Volunteer Coordinator, Environmental Project Manager, Development and Communications Coordinator and most recently as the Director of Communications and Development. Anna is responsible for building the Mississippi Park Connection team and coordinating efforts with the leadership team of the Mississippi National River and Recreation Area. She is also responsible for major gifts fundraising and grants. W. J. Breckenridge Chapter Izaak Walton League of America 8816 West River Road Brooklyn Park MN 55444



If you would like to submit an article for the Timberlines, please send it to Barbara Franklin at: bbfrankli@gmail.com Deadline is the First Day of each month.

All articles in this newsletter do not necessarily reflect the position of the Breckenridge Board of Directors. The Editor reserves the right to edit material as necessary.

Chapter House Rental Rates

Members:(damage deposit \$100.00) Monday through Thursday\$150.00 Friday, Saturday, Sunday & Holidays..........\$200.00

Scouts:(damage deposit \$50.00) Overnights.......\$50.00* *Rates and terms subject to change without notice; please contact the Chapter for special circumstances. The Rental Agreement and Renters Checkout List are available on our website Rental Chairperson: Tim Johnson (Leave messages at johns860@mac.com)