IMPROVING TRAIL ACCESS

With the help of a private foundation, the Deer Lake Conservancy installed one bridge and two boardwalks to cross stream channels which flow into the NE Pond Preserve last fall. A wildlife viewing platform was also constructed at the edge of the pond.

Grants from the Trillium Foundation provide funds to manage the Johnson Preserve. The Trillium Foundation grant supported replacement of an old bridge crossing a stream channel that flows into Elizabeth's Pond.

Conservancy volunteers prepared the sites on both properties, and Custom Manufacturing, Inc. from Clinton, Wisconsin built and installed the structures. We will also be installing new signs and replacing some 20-year old signs at our preserves this year.

Our trail crew completed a trail extension around the south side of Jenny's Pond over the winter. Spring trail clean-up was a challenge this year following this past winter's heavy snow and ice storms. Many hours were spent cleaning up trees and branches that had fallen on the trails. Interested in helping out with trail maintenance? Email dlcdirector@dlcwi.com.



Observation platform - NE Pond Preserve



New bridge - Johnson Preserve

PHOTOS BY JIM MILLER



Annual Flagstad Farm Celebration Hosted by the Deer Lake Conservancy and the Deer Lake Improvement Association

Live music and refreshments at the Flagstad Farm Saturday, July 29, 2023 • 6-9 PM All ages and guests are welcome

2023 CONSERVANCY OFFICERS & DIRECTORS

Phillip Foussard, President Jim Miller, Vice President Tom Pesek, Secretary/Treasurer

Jav Becker Mark Bovken Tom Bradley Rod Johnson Tom McBride John Patterson John Wright

DEER LAKE CONSERVANCY

2023 ANNUAL MEETING

TROLLHAUGEN CONVENTION CENTER Saturday, July 8

Refreshments and Welcome 8:30 a.m. Lake Association Business Meeting 9:00 a.m. Conservancy Business Meeting 10:00 a.m.





DEER LAKE CONSERVANCY REPORT SUMMER EDITION JUNE 2023

NEW ACQUISITION SECURES WATER QUALITY PROTECTION

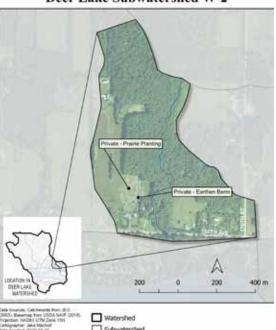
The Deer Lake Conservancy recently purchased a 14-acre parcel in the area we refer to as watershed 2. This watershed drains into the north side of Deer Lake, east of Dry Creek Road. We installed our very first water quality project on this property in 1997. This relatively small-scale project, on a parcel we didn't own, was manageable for the organization as we were just starting out.

Although small, it was an important first step in our water quality efforts. We captured runoff from agricultural land to the north with a 630-foot long wing dam which holds back runoff and establishes a pond of about 5-acres. When water is held in the pond, sediments and attached nutrients settle out, with cleaner water released at a slower rate. Slower runoff also results in less erosion and sediment carried to the lake. Runoff from this area flows to the lake along very steep slopes of a deep ravine to the lake. With the project in place, runoff through this ravine only flows during snow melt and after large rain events. Phosphorus runoff from this area was estimated to decrease by 90% following project installation.

The project was originally installed with cost-sharing and engineering support through Polk County from the Balsam Branch Priority Watershed Project. Importantly, the agreement with the private landowner required maintenance of the project only through 2008 (consistent with the project requirements). To secure water quality benefits into the future, we identified

acquisition of this property as a top priority in the 2020 Deer Lake Management Plan.

Deer Lake Subwatershed W-2



The DLC will apply for a Wisconsin Department of Natural Resources grant this fall to hopefully support up to 75 percent of the cost of property acquisition. We welcome and will appreciate contributions toward property purchase and grant match from our members. Because not all of the property is needed for the water quality benefits described above, we plan to sell a portion of the property to an adjacent property owner.

Our mission is to preserve Deer Lake and the surrounding land that contributes to its natural, scenic and recreational value. Thanks to our generous member donors.

To join or make an additional contribution, go to: https://www.dlcwi.org/contributing or mail a check to:

> **DEER LAKE CONSERVANCY** P.O. BOX 1139 ST. CROIX FALLS, WI 54024

For more information, visit our website: https://www.dlcwi.org

NORTHEAST POND PRESERVE

Walk and Learn Event Highlights Two New Water Quality Projects

Several Deer Lake owners joined Polk County Engineering Technician Karsten Peterson on a June 5th tour of two water quality projects installed at the NE Pond Preserve in the fall of 2022.

Karsten explained that he designed the ponds to capture runoff from the agricultural field to the east. Starting with the south pond near the road, he explained that a 7.8-acre area, which now drains to the pond, formerly carried nutrients and sediment and eroded a shallow ditch to the main preserve pond then on to Deer Lake. A pool of water tends to remain at the bottom of this pond after some water drains slowly from the pond outlet. The pond reduces nitrogen loading by 82%, phosphorus loading by 85%, and sediment loading by 86%. A secondary benefit is the habitat provided by the pool. Hundreds of tadpoles were observed wiggling around in the water, and wildlife are using the pond as a watering hole.

The north pond captures water from a similarly-sized area (8.3 acres) but with slightly different results. Here the soils are sandier and therefore drain more quickly. As a result, the pond tends to dry out between rain events. Nitrogen loading is reduced by 57%, phosphorus loading by 59%, and sediment loading by 60%. Both ponds were planted with native seeds after installation late last fall. This dry spring has resulted in poor seed germination so far. We will monitor conditions and may need to re-seed once soil moisture has improved.

The group also walked the trails that took us to the newly installed boardwalks and observation platform. While we were disappointed to not see our resident trumpeter swans that day, others have observed the swans who have returned for an eighth consecutive year of nesting here. We continued to enjoy the trails and each other's company by completing the trail hike around the pond.



Some of the folks who joined us on our June 5 Walk and Learn Event at the NE Pond Preserve. Others missed the end of hike photo op!



Karsten describes design and installation from the bottom of the north pond.

PHOTOS BY DIANE BARGHINI

FLOAT AND LEARN

Join us on the water for a new spin on our Walk and Learn Events

Lake Biologist, Steve Schieffer, will share information about lake and tributary water quality, curly leaf pondweed monitoring, and zebra mussels with local pontoon "captains" piloting the boats.

Thursdays, July 13 or August 17 4:30 - 6 pm

Space is limited and available on a first-come, first served basis. For more details and to register, email dlcdirector@dlcwi.org or leave a message for Cheryl at 715-225-0690.



Lake Biologist, Steve Schieffer will guide the Float and Learn Event

THE SHORES OF DEER LAKE

No doubt about it, how we manage runoff from our properties affects the lake. Two families recently worked with the Deer Lake Conservancy to make positive changes on theirs.

Tom and Barb Gartland own property on the northeast side of the lake. When it rained hard, a pathway to the lake washed out and led to repeated repairs. Small gullies also formed along the hillside which carried sediment to the lake. The Gartlands worked with DLC Executive Director, Cheryl Clemens to design diversions to direct water to rain gardens which now capture and infiltrate runoff water. Lakeside Services installed the rain gardens. Clay in the surface soils made infiltration slow, so Lakeside dug deeply beneath the gardens to find sand.



One of Gartland's rain gardens

FROM THE GARTLAND'S:

"After several frustrating years of dealing with run off issues we reached out to the Conservancy for help. We meet with Cheryl Clemens who designed four rain gardens on our properties to eliminate the problem and protect our property and Deer Lake. She not only designed the solution but led the process and managed the gardens installation last summer.

The results are fantastic. While we haven't had any rain so for this summer, we did twice last summer right after completion, and we experienced tremendous success. Many thanks to the Conservancy and Cheryl.

Roger and Elizabeth Mortenson experienced similar problems across the lake where runoff from the road and a parking area ran down a sidewalk and washed out landscaping on their hillside. Here we used rock infiltration above a native planting to slow and absorb runoff. They were so pleased with the result that we are in the process of designing addition rock infiltration this year. The landscaper for these projects is J&M Landscaping.

FROM THE MORTENSON'S:

"Elizabeth and I feel blessed to be living on such a beautiful lake and find it our responsibility to do our part to preserve and improve the lake any way we can for our grandchildren to enjoy well into the future. Helping control and filter runoff is one way we can do that. It really is a win/win opportunity – Deer Lake becomes a cleaner healthier lake, and we get tremendous aesthetic value to our property. Working with the Conservancy on these projects provides us the technical guidance we need to bring our ideas to life in a way that benefits both our property and the lake overall. The process is quite painless and the end result is very rewarding."

Looking forward to this next project and finally getting our property to the level it needs to be. Thanks for all your help and support.

Herons mark the spot of both of these and many other water quality projects around the lake. If you are interested in investigating alternatives for reducing runoff and erosion and improving habitat along Deer Lake shores, please contact Cheryl: dlcdirector@dlcwi.com or 715-225-0690. Area landscapers are booked well ahead, so it is a good idea to start planning early.



Mortenson's rock infiltration and native planting